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ECONOMIC FLUCTUATIONS

IN CANADA

DURING THE

POST-WAR PERIOD

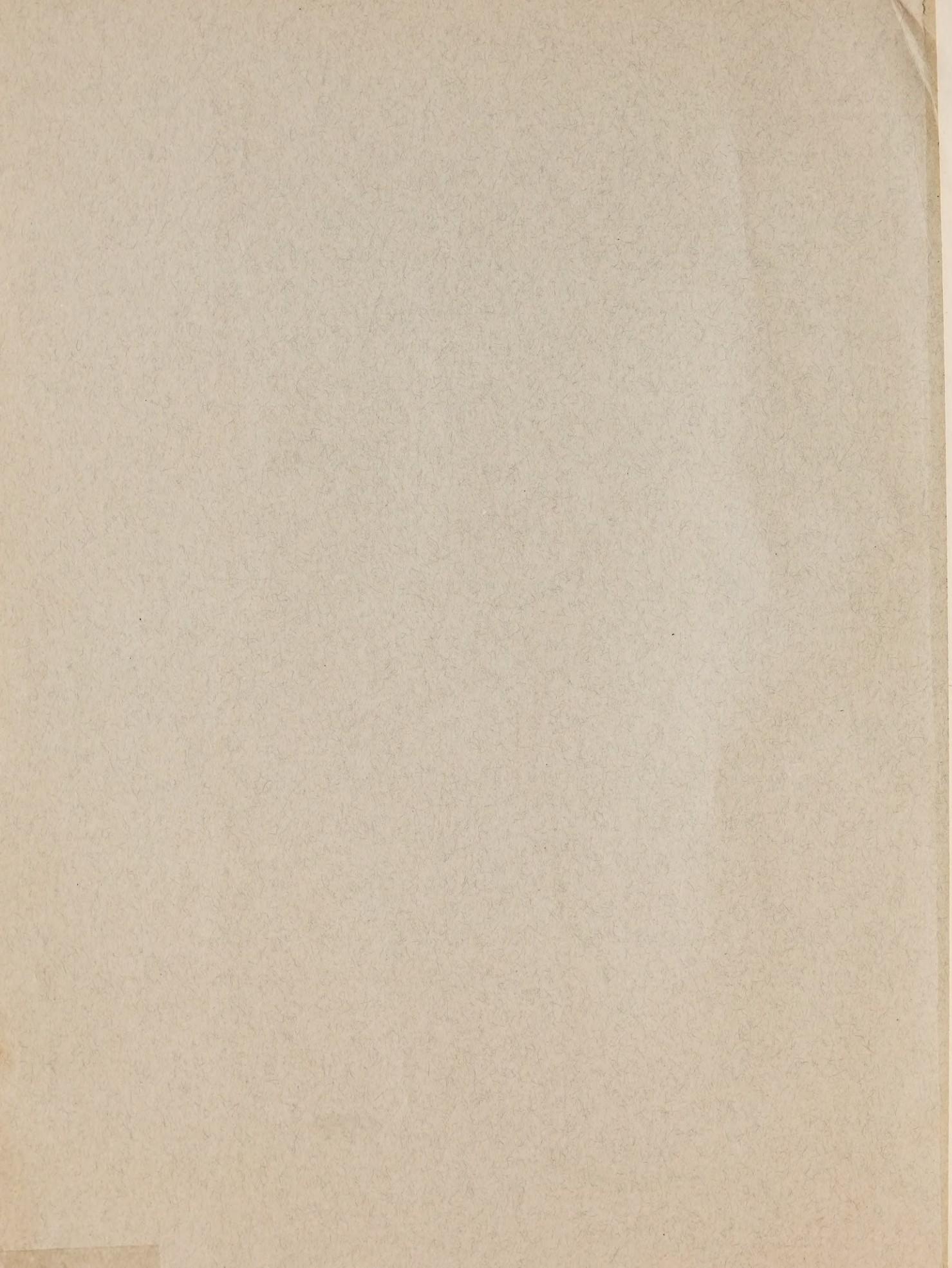
ISSUED AS A SUPPLEMENT TO THE
MONTHLY REVIEW OF BUSINESS STATISTICS.

JANUARY, 1938



OTTAWA
1938

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P R E F A C E

The Canadian economy during the post-war period showed marked diversity. In spite of the impact of two major depressions, the volume of production recorded a moderate gain over the eighteen years. Several industrial groups, based on natural resources, expanded rapidly, more than counterbalancing recessions in other lines. Prominent among the former were the paper, mining and power industries, the annual gain in their output ranging from four to nine per cent. Progress in agriculture was moderate, no bumper crop of grain having been harvested in the last eight years. The annual gain in manufacturing generally was limited to about 1.5 per cent, declines being shown in construction and railway traffic. While an advance was recorded in general production much unevenness was shown in the progress of the different industries.

Industrial expansion was achieved in the face of a downward trend in commodity prices. During the thirteen years ended 1933, the trend of prices pointed sharply downward, offsetting the inflation arising out of war financing. The index declined from 164 in May, 1920 to 63.5 in February, 1933, and the dislocation was accentuated by the concentration of the major part of the deflation in two relatively short periods. Another serious matter was the low level of prices for raw materials compared with manufactured goods. During the greater part of the period under review primary producers were placed at a disadvantage by a marked curtailment in purchasing power.

Short-term fluctuations were more extreme than in any other period in Canada's history. The deflation of commodity prices was one of the main elements in the first depression after the war, while marked decline in speculative values characterized the second. Although these developments were outstanding, practically every sector in the social economy participated in the fluctuations. The advance and decline of production was accompanied in large part by a parallel movement in prices, and as usual fluctuations in the output of producers' goods were more marked than in the production of consumers' goods.

The purpose of the present bulletin is to assist in the interpretation of some of the series which affect the material well-being of Canada. About three hundred and fifty series were subjected to statistical analysis, the results of which are presented in the tables and charts which follow.

The analysis took the form of (1) finding the long-term trend, (2) measuring the amplitude of the fluctuations from that trend and (3) computing the relationship of the fluctuations of each series with those in the index of the physical volume of business regarded as one of the best measures of the typical cycle. The familiar methods of curve fitting, standard deviation and correlation were used in this connection.

The present bulletin is the fifth in a series published as background to the data of the Monthly Review. The first gave a number of series by years and by months from 1919 to 1930. The second and third presented monthly indexes and original data prepared in connection with the compilation of the business indexes appearing on page 11 of the Review. The fourth supplement presented annual data for about 1,400 series with the computation of the annual average percentage change in the 15-year period following the war.

The present supplement to the Monthly Review of Business Statistics was prepared by Sydney B. Smith, M.A., and R.A. Brown, M.A., of the Bureau Staff.

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ECONOMIC FLUCTUATIONS DURING THE POST-WAR PERIOD^{1/}

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Business Statistician: Sydney B. Smith, M.A.

An upward trend for most business factors indicated, despite pronounced economic fluctuations, a fair measure of national progress in Canada during the post-war period. Business operations showed acceleration in volume, most of the forty-six components of the official index recording an upward long-term trend. Industrial capacity was greatly expanded especially by the mining, paper and power industries. As a growing proportion of Canadian enterprise was devoted to the production of plant and equipment as opposed to that of consumption goods, the economy was more susceptible to wide fluctuations. Currency inflation, arising from war financing, was another contributing influence in the same direction. The declining trend of commodity prices, while practically inevitable under the existing conditions, was one of the principal adverse developments.

The period since the war constitutes a relatively homogeneous era of great economic interest. Statistical data are more abundant than for previous year, and a study of the period yields a valuable basis for current economic interpretation.

National Income

Estimates of the national income are of paramount importance in tracing economic fluctuations on an annual basis. Such estimates when related to the existing price levels are the most important as well as the most comprehensive of all economic statistics since they are the best possible test of the material well-being of a nation. The amount of the national income, when divided by the population that is maintained out of it in order to secure a per capita figure, is the ultimate test of the general standard of living and of the comfort prevailing in the country under consideration. Again, the relationship which the total amount of taxation imposed bears to the total national income is the best recognized measure of the solvency of a nation.

Thus the statistics of national income constitute the coping stone of any national statistical system. Indeed, the quality and the adequacy of the statistical system of any country may be best judged by the facilities which it affords for computing the amount of the national income and of its distribution among the different parts of the country and among the various industrial classes of the population.

The principal method of computing the national income of Canada is by taking an annual record of the values created by the leading industries as disclosed by the census of industry covering the nine groups engaged in commodity production. With this record of the values created by five-eighths of the gainfully occupied or active population engaged in such work, an estimate is made for the production of the remaining three-eighths. The latter are occupied with the creation of place and time utilities and with the rendering of services, and it is assumed that they are equally as productive as the group engaged in the creation of form utilities.

The national income expressed in terms of value receded after the short-lived active period from 1919 to 1920 to the relatively low point of \$4,500 million in 1921. There followed seven years of expansion, the maximum having been reached

^{1/} Description of method follows Introductory Table.
(iii)

in 1928 at \$6,594 million. Owing mainly to the decrease in net agricultural production, the total for 1929 was at a somewhat lower level than in the preceding year. The decline continued until 1933 when the minimum was reached at \$3,193 million. Marked advance was shown in the three years from 1934 to 1936 inclusive. After elimination of the long-term trend, close correlation ($r = .843$) was shown between this factor and the index of the physical volume of business as published in the Monthly Review of Business Statistics. The contours of the two factors were very similar, the period from 1921 to 1955 being divided into three well-defined parts of about equal duration. The fluctuation in the national income was somewhat greater than in the business index as indicated by a standard deviation of 16.61 against 13.72. For this compilation, both factors were expressed as a percentage of the base year 1926, annual data being used in both cases.

Real Income

Since the national income is measured in dollars, it is important to recognize that changes in the price level are an important influence in determining the fluctuations which take place in the estimates. While available price indexes are not sufficiently representative to accurately adjust the income estimates for price changes, the wholesale price index provides a general idea of the influence of prices. Thus when the official index number of prices is taken to correct the estimate of the money value of the national income for the decline of prices, it is found that \$66.70 bought on the average as much in commodities in 1952 as \$95.60 purchased in 1929. If the money value of the national income had declined by one-half during these three years, the correction for the drop in prices would reduce the decline in the real national income of commodities and services to only 28.3 p.c.

Using the wholesale price index for deflating the estimates of the national income, we find that the results for particular years are greatly changed. The national income stated in dollar terms was relatively high in 1920, while the real income was quite different. The real income was slightly above normal in 1923, while the national income expressed in monetary terms registered a considerably lower rating. The preliminary estimate for 1936 of the national income made a better showing than the income adjusted for price changes. The fluctuation of the national income in monetary form was more extreme than in the other, as shown by standard deviations of 16.6 and 12.0 respectively, for the two indexes. During the post-war period, the real income has shown an annual increment of nearly 1.6 p.c.

Production

Production plays a most important part in the interpretation of economic conditions. In a special sense, prosperity and depression are closely correlated in a profit economy with the fluctuations in the volume of production, and prosperity is regarded as a function of the proportion in which personnel and industrial equipment are employed. Composite production data occupy a central position in the work of analysis. Through an examination of the relationship of the business index with other fundamental economic factors, historical sequences may be established that will prove of great value in tentative forecasting. Among the factors that are comparable in this connection are wholesale prices, capitalized bond yields, bank deposits and common stock prices. Better results may be obtained by a comparative analysis of these factors than by an isolated study of the trend of any one of them.

The index of the physical volume of business is based on 46 factors representing mineral production, manufacturing, construction, electric power and distribution. Each of the factors adjusted for seasonal tendencies was multiplied by the average price during 1926. The resulting products were added to give, at average

prices of 1926, a total value of the production of the included items during any given month. The production value for any month compiled in this way was expressed as a percentage of the average value during the base year of 1926. The aggregative method as used in the compilation is easy to comprehend and has the additional advantage of being free from statistical bias.

Although an annual census of industry is taken in Canada, the results obtained are not sufficiently current to serve the needs of economic interpretation. It is consequently necessary to resort to monthly production statistics. The policy is to depend on representative samples rather than on extensive coverage. Following usual practice, the index is restricted to industries reacting to the forces of economic fluctuations. The index was chosen as a standard with which the other factors of this study were compared. The Pearsonian coefficient of correlation was computed between the business index and about 350 other series.

For the purpose of this introduction, the business index was analyzed for the 18-year period from 1919 to 1936. During this interval the annual increment was 1.71 points, and the standard deviation was 13.72 points. From 1919 to 1925, the index was almost continuously below the long-term trend.

Producers' and Consumers' Goods

One of the main causes of economic fluctuation is the change in the volume of purchases of durable goods by business enterprises actuated by changes in the prospect for profits. The volume of raw and intermediate goods bought by business enterprises is large as contrasted with purchases of such commodities by individual consumers. The purchases of consumers' goods are obligatory for the most part as they cannot be long postponed. The buying of durable goods is optional as it can be postponed since the existing durable goods can be made to render extended service. Thus the index of the output of producers' goods on the 1926 base advanced from 60.8 in 1921 to 131.5 in 1929. Although it declined to 60.7 in 1932, the general trend showed an annual increment of 1.07 points in the 18-year period, and there was a recovery to 101.5 in 1936. The production of consumers' goods was not subject to nearly so wide a fluctuation and a greater annual increment was recorded for the period in question. The index advanced from 69.4 in 1921 to 114.3 in 1929 and declined to 93.5 in 1932. The annual increment in the index from 1919 to 1936 was 2.4 points.

In accounting for the wide fluctuation in production during the post-war period, the added variety of the output should not be overlooked. Enterprise has largely departed from the production of the immediate necessities of life including food, clothing and essential shelter. The demand for commodities of this group is relatively inelastic. The case is quite different with the instruments of production and with various goods durable and non-durable, satisfying the less imperative needs. As durable goods in general and non-essential consumers' goods come to occupy a large place in total output, demand is capable of rapid expansion or contraction with corresponding fluctuation in productive activity. During the advancing phase of the last cycle, there was an appreciable advance in the proportion of durable goods in the total output. Advancing standards of living brought about a steady rise in the relative importance of comforts and luxuries as against pure necessities in the total of goods produced. The reverse occurred during the lengthy depression recently ended.

Agriculture

With the increase in world economic well-being since the first of the century, there has been a change in the nature of services demanded. The demand for agricultural produce is relatively inelastic. With every improvement, therefore, in

agricultural technique which tended to supply the produce more rapidly than the increase in demand, which in turn is dependent largely on the increase in population, resources were transferred from agriculture to industry, trade and the various professional services. Since the war, the transfer of resources from agriculture has continued. From the general standpoint, there has been a decline in the consumption of cereals, but a large increase in the demand for fruit and dairy products.

The adverse weather conditions in Western Canada during the last eight years has placed a downward bias on the long-term trend of agricultural production. Even after the price factor is eliminated from the gross value of agricultural production, the normal increment of the resulting index is only .34 points. The real value of the agricultural output was relatively high from 1922 to 1929, contributing to the general prosperity of the period. Aside from 1932, the agricultural depression continued during the seven years ended 1936. The effect of climatic conditions was manifest from the disparity between the fluctuations of agricultural returns and the index of the physical volume of business. The coefficient was only .39, indicating that no significant correlation exists between the two factors.

Construction

Several influences are responsible for fluctuations in the operations of the building industry. Of prime importance are shifts in population and the events associated therewith; since buildings are immobile and durable, a shift of population geographically is as important as an increase in the total. Building activity, for various reasons, does not decline immediately the demand for new space begins to wane. The activity in building is perpetuated beyond the time when population growth has ceased to be of importance.

In the second phase, the excess space hangs over the market discouraging even building for replacement. In the face of rigid property taxation and interest payments, the reduction of revenue from existing structures because of vacancy or lower rental rates often causes financial difficulties and foreclosures; and with properties available at foreclosure prices, there is little incentive to invest in new building.

The ease or difficulty of borrowing in the long-term money markets is important in the consideration of building cycles of short duration. Interest rates in this field change but seldom and the element of real importance in the long-term money markets is found in the availability of funds at the standard rate.

From the viewpoint of purchasing power and employment the declining activity in building helps to undermine the advance in business and sooner or later general economic conditions also turn for the worse and become a contributory factor in the decline of the building cycle.

The inactivity of the construction industry was one of the elements in the depression following 1931, and relatively quiet conditions have continued to the end of the period under review. Prosperous conditions in the industry were enjoyed from 1926 to 1931, while on a volume basis, operations, aside from 1922, were below normal from 1919 to 1925. The official index based on contracts awarded with adjustment for changes in costs showed an average annual drop of nearly one point for the 18-year period under review. While fluctuations were much wider as indicated by a standard deviation of 35.2, the correlation coefficient of .89 indicates close relationship with the movements of general business.

Productivity

Productivity per wage earner in Canadian manufacturing plants rose sharply in 1922 from the low level of the preceding years and subsequently continued to rise at a more moderate rate. While the factor of better organization is not susceptible of measurement, the number of salaried workers has shown a growth roughly in proportion to the expansion in the volume of output. Production on the other hand, because of technological improvement, has outstripped the growth in the number of wage earners. The index of the volume of productivity per wage-earner showed a gain of 3.06 points per year from 1919 to 1935. A fairly significant correlation was shown with the index of the physical volume of business during the period.

The training of labour plays a relatively unimportant part in the mass production of standardized articles. In such industries a complete change has been brought about in the internal organization of the factory by the introduction of the conveyor system. The result has been the continuous accumulation and transport of material from one section of the factory to another, where formerly the production of each article was confined to a particular part of the establishment. By the new method, men and machines are not grouped together according to kind, but are placed in the sequence of the functions they perform in producing the finished article. By the ordered sequence and systematic distribution of the work, standards of mechanical excellence and economies in production, undreamt of in the older industries, have been attained in the manufacture of some of the newer standardized articles, especially automobiles.

In general, the chief factor during the preceding period in expanding production, was an enlarged body of wage earners. Recently, however, more efficient technical equipment, improved organization and enhanced skill on the part of the working force, seem definitely to have supplanted numbers as instruments of expanding production. The number of wage earners employed in manufacturing plants was 468,000 in 1935 against 524,000 in 1919 and in the meantime, the production of manufactured goods increased 39 p.c.

Railways

Canada is greatly dependent on transportation, the railways being of prime importance in the national development. A means of ready movement between the widely separated provinces was essential, and even with the advent of other forms of transportation this factor has not lost its force. The railways also perform a useful function in extending the bounds of the world market economy to the doors of the Canadian living far from the seaboard. Large scale freight transportation was a prerequisite to sharing in specialization and world wide division of labour.

The railways were more adversely affected by the recent depression than the majority of Canadian industries. The decline in gross operating revenues from 1921 to 1933 was more than 50 p.c. for each of the two main systems. The freight carried dropped 57 p.c. on the Canadian National and 53 p.c. on the Canadian Pacific, while the passengers carried declined 54 p.c. and 51 p.c., respectively, on the same roads. An effort was made to reduce operating expenses but the extent of the reduction or postponement was naturally limited. Between the same years, the index of the physical volume of business declined less than one third, while the significant railway factors dropped more than 50 p.c. Moreover, the recovery in railway factors has been of a more moderate character than in general business operations. The extended use of truck, bus and private automobile, naturally had a restraining influence.

In measuring the post war trend of railway operations and revenues, it must be remembered that the last seven years out of the eighteen covered a period of depression. Any measurement of the post war trend, consequently must be affected by the low levels of the last seven years. If the deep and lengthy depression had occurred at the beginning rather than at the end of the 18-year period, the resulting trends would have been quite different.

In the last supplement, the annual average percentage change was estimated for 22 operating accounts of Canadian railways. With one exception, each of the 22 factors showed annual average percentage declines in the 16 years from 1919 to 1934. As the expenses declined to a greater extent than the gross operating revenues, the latter showed the only annual average percentage gain. The extremely low level of net operating revenues in the early post war years also had an influence on the trend of this factor. The decline in the trend of the index of gross operating revenues from 1919 to 1936 was 2.12 points per year while a slight gain of .004 was shown in net operating revenues. The fluctuation in net revenues was much greater than in gross revenues as indicated by a standard deviation of 28.33 against 13.84.

The trends of railways operations were downward in contrast to the upward tendency of the index of general business. The return to prosperity may result in a revival for the railways, thus reversing the long-term trend.

Employment

The chief advantage of employment statistics as an indicator of economic activity is that they afford a measure common to all business. One can count the number employed and so register changes alike in a cotton mill and an automobile plant, a department store or on a railway. Data on production, when available at all, require widely different units of measurement and data on the value of products are distorted by changes in the purchasing power of the currency. The number of workers on payrolls is a measure applicable over long periods of time and in a wide variety of branches of business.

Employment statistics give some basis for forecasting and constitute raw material for study of the whole problem of fluctuations both seasonal and cyclical in industry and commerce, although they alone do not afford sufficient data for an exhaustive study of these problems. Their first and most important use is, obviously, to measure increase or decline in numbers employed. They measure also with some precision the expansion or contraction of production and for this purpose they make comparison possible between industries. If, for instance, they reveal that raw materials are being produced in increasing volume without a corresponding increase in the manufacture of goods for the ultimate consumer, the danger that manufactures may be overstocked with basic materials is indicated.

It is possible, using census results and other relevant data, to estimate from 1921, the number of wage earners and the number at work, the difference between these two being the number of wage earners out of work. Any person out of work for at least twelve months is not regarded as a wage earner in this connection. The number of wage earners increased from 1,900,000 in 1921 to 2,800,000 in 1929, and then declined to 2,500,000 in 1933. The average number of wage earners at work reached a peak of 2,500,000 in 1929 and declined to 1,800,000 in 1933. According to this estimate, 700,000 or 29 p.c. were out of work during the worst year of depression. During the last four years, the position has been reversed. A marked increase occurred in the ranks of the wage earners employed, while a relatively less intensive decline was shown in the unemployed.

The annual estimates of wage-earners at work showed almost perfect correlation with the index of the physical volume of business. During the 16 years from 1921 to 1936, the coefficient was .975, incidentally presenting confirmatory evidence of the approximate accuracy and barometric utility of the two factors. After the elimination of the influence of the long-term trend, the calculation implies that the fluctuations in production and employment are in close accord. Such a high degree of correlation is seldom met with in the field of economic research. The intermediate fluctuations in unemployment failed to conform as closely to the conventional pattern, since the inverse correlation between the indexes of wage-earners out of work and of the volume of business was about .87.

The annual increment of the index of the physical volume of business was 1.71 points against .78 for the index of the number of wage-earners at work, the disparity representing the advance in industrial efficiency in recent years.

The ultimate test for any industrial system is the degree to which it improves the condition of life of the people who live under it. There is no more important question in the field of social history than that of the condition of the people which condition contributes the best index of the relative success or failure of any economic or industrial system. It is, accordingly, desirable to chart the material progress of the largest economic group in the country, namely those who work for wages or for salaries.

The best general measure of wage-rates is given in the January supplement to The Labour Gazette. The information is compiled from reports secured annually from representative employers and trade unions and also from union agreements. For the present purpose, the weighted average of wage-rates in six main branches of production was transferred to the base of 1926. The cost of living index prepared by the Dominion Bureau of Statistics was used as a deflating device. The resulting index of real wages showed an annual increment of 2.04 points. Practically no correlation was shown with the physical volume of business. The index of wage rates was relatively high from 1921 to 1924, low from 1925 to 1930 and high again from 1931 to 1933. Fluctuations, however, were relatively slight, the standard deviation being limited to 2.84 points.

A different tendency was shown in real earnings in manufacturing plants. Average yearly earnings were computed by dividing the average number of wage-earners by the amount of wages paid. The average yearly earnings were then adjusted for changes in the cost of living. A change in the method of computation of the number of wage-earners applicable to the period from 1925 to 1930 tended to increase the number of wage-earners reported and consequently to lower the average yearly earnings for the six years. In spite of this variation in the method, however, real earnings were greater than "normal" from 1923 to 1929, and except in two cases, below "normal" in all other years from 1919 to 1935. Hence, real earnings tend to be high in prosperous years and low during depression, but the relationship to the conventional cycle was far from close. Fluctuations in real earnings were not very different from those in real wage-rates, the standard deviation in the former having been 2.25 points. During the post-war period, real wages and earnings per wage-earner recorded an advancing trend, the annual increments having been 2.04 points and 1.14 respectively.

The Export Trade

It has long been realized that external trade is particularly vital to the economy of Canada. Abundant natural resources encourage the production of a considerable number of commodities far in excess of the normal requirements of the

domestic market. There are conversely many products especially industrial raw materials which may only be produced here at a considerable disadvantage, while the production of others is practically impossible. Indicative of the dependence upon the exchange of goods in international markets, Canada recently reached the fourth place among the exporting nations surpassed only by Great Britain, the United States, and Germany.

Economic nationalism unfortunately has been a potent force in curbing international trade in the post-war period. Excessive protection in the form of tariffs, quotas, depreciated currencies and the control of foreign exchange tended to minimize international specialization and to encourage production in high-cost areas. Behind a shelter of a wide variety of governmental restrictions, agriculture was artificially stimulated in industrial countries and manufacturing fostered in agricultural countries. On both sides, the advantages of specialization were lost, production was costly and demand dropped to abnormally low levels. Signs were not lacking, in the last two or three years, that many countries were returning to the world-wide trading system. The automatic adjustments characteristic of that system were again making possible the advance of living standards.

The volume of Canadian exports was heavy from 1923 to 1929, the central portion of the post-war period. The outward movement was slightly above normal in 1919 followed by three years of adverse conditions. The recent depression was of even greater intensity and duration, lasting from 1930 to 1934. The fluctuation in the index of the export volume was slightly greater than for the index of the physical volume of business generally. A fair correlation between the two was shown by the coefficient of .50.

Economic conditions in other countries, especially in Great Britain and the United States, have a marked influence on the domestic position. The prosperity in any one country tends to spread to others through the channels of trade, banking and investment. It is consequently natural that the fluctuation in export trade should slightly precede or coincide with the fluctuation in business operations in Canada.

An annual index of the visible and invisible export trade of Canada on a dollar basis may be constructed for the last 18 years by the use of the statistics prepared by Prof. F. A. Knox, and the Bureau. Merchandise exports, even when adjusted by the deduction of settlers' effects and other non-commercial exports, make up more than half the total of the annual international credits of Canada. The expenditure of tourists in this country is of growing importance, while gold exports have increased rapidly in recent years forming a larger proportion of the credits established abroad by Canadians. The fluctuation in our international credits followed the conventional pattern during the period under review. Owing partly to inflated prices, the level was not far from the normal line in 1919 and 1920, but dropped sharply in the following year. A relatively high level was maintained from 1925 to 1930. Credits were then subnormal for five years, an excellent standing being regained in 1936. The coefficient with the physical volume of business was .90, but a closer correlation was shown with the national income in which prices also play a prominent part.

Prices

The maintenance of relatively uninterrupted prosperity depends in large part upon the success in securing and maintaining proper relations between the prices of different goods and services. If various prices are not kept in proper relation to each other, they cause disastrous. For example, improperly related

prices may cause production costs to advance faster than selling prices, or costs of and returns from the production of capital and consumption goods to get out of line. In all cases, it is desirable for prices of goods, labour and capital to be sufficiently flexible to adjust production and employment promptly to changing demands and costs. Otherwise, production, employment and the whole economic organization get out of gear and a period of depression follows.

Flexible or unrestricted prices in a really competitive regime of private enterprises tend to maximise production, and hence the means of meeting human needs. Labour and capital producing commodities having strict demand tend to be shifted to the production of things in greater demand. Hence there must be parity or proper relations between prices if exchanges are to be continuous, if labour and capital are to be kept employed, if the modern economic organization is to function smoothly and produce a maximum of social income.

The extent of the fall in prices in Canada during the post-war period amounted to no less than 5.13 points per year in the general index. The adverse influence of this was aggravated by the concentration of the decline in two relatively short periods from 1920-21 and 1929-32. Between these two periods, the general level was fairly well maintained without important fluctuation in either direction. Prices recovered in two stages after the first quarter of 1933, the process of consolidation being in evidence from the beginning of 1934 to midsummer 1936. While the price cycle after adjustment for the long-term trend bears some slight resemblance to the production cycle, the coefficient at .29 shows no significant correlation. The relatively negative results are quite different from those of the pre-war period. Thorough analysis of that period pointed to the conclusion that prices constitute the best single series with which to compare all other factors, the best single standard of business conditions generally. In the early years of the century when the gold standard was operative in most countries, price movements were preeminently characteristic of the business cycle and considerable correlation was shown with the outstanding measures of cyclical fluctuations.

The prices of raw materials normally slump sharply upon the advent of depression while the prices of manufactured goods remain relatively stable. By expressing the price index of raw materials on the base of 1913 as a percentage of the general price index, it is evident that the primary producers were placed at a decided disadvantage from 1921 to 1924. During the last seven years, however, the purchasing power of primary producers as measured by this test, reached a much lower level, probably unequalled since the depression of the nineties. Regarding the pre-war relationship as normal, the only period during the last eighteen years when this group enjoyed a favorable parity, was from 1926 to 1929. In a country like Canada, in which such a large proportion of the gainfully occupied are engaged in the primary industries, the price maladjustment disclosed by this computation was a serious matter, adversely affecting for fourteen of the eighteen years the entire social economy.

From the standpoint of the disparity in prices alone, conditions in the greater part of the post-war period favored the manufacturing community rather than primary producers. Even from 1925 to 1929, when the ratio of the prices of manufactured goods to industrial materials showed a large measure of stability, the relationship was less propitious than in the period just prior to the war. The story of the years before the war was one of the constant cheapening of manufactured goods. Refinement of technical methods, development of mass production and improvement of management were all tending to lower the prices paid by consumers for the services of fabricating agents. And it has only been during the last 20 years that an extensive improvement of productive techniques has occurred in the cultivation and

extraction of raw products. During the war period, rich new territories were exploited and a rapidly rising price level stimulated expansion in the output of certain of these goods. The deflation of 1920 found this group in a vulnerable position. Manufacturing producers were able to liquidate more promptly and to adapt production schedules to marketing possibilities more readily.

From the above angle, secondary producers occupied a more favorable position in depression than in prosperous times. The depression, however, brought marked reduction in the available market and consequent curtailment in the volume of output. The full weight of the burden of a large capital equipment, much of it constructed under conditions of exceptionally high cost, was felt especially during the last depression. The remarkable gain in industrial productivity combined with the position of a marked price advantage enjoyed by manufacturing producers after 1921, permitted a great advance in the aggregate purchasing power of industrial wage-earners and of other groups drawing their incomes from manufacturing industries. During eight years of but slight change in the general price level enduring commitments had been made, constituting barriers against a downward readjustment. The marked decline in prices of materials during the early years of the recent depression contrasted with the relative stability of manufactured goods, led to an increase in the fabricational ratio from 104.1 p.c. in 1929 to 132.8 p.c. in 1932.

It now appears that the downward long term trend of prices terminated in the first quarter of 1933, having exerted an adverse force for thirteen years. With the heavy investment in capital equipment and the great importance of overhead costs in the typical modern industry, the stresses of readjustment necessitated by a protracted period of falling prices was more painful and prolonged than in any previous period of falling prices. The ratio of manufactured goods to materials declined from 1932 to 1936 marking the return to a more normal relationship.

Stock Prices

Prices on the exchanges represent a consensus of opinion on the part of the general public as to the current value of securities. Present conditions are ever being analyzed to the end that future tendencies may be predetermined. Normally an improvement in general business conditions means a corresponding improvement in the earnings of industrial companies and in addition a betterment in the price of industrial stocks. A depression in business adversely affects industrial earnings and causes industrial stock prices to decline. But of special barometric interest is the fact that the fluctuation in the prices of stocks usually precedes that in business conditions because of the constant endeavour of the market to forecast developments. The men who are in closest touch with current conditions sense the change before it actually occurs and the stock market reflects their opinion.

The primary function of the stock exchange is to facilitate the most productive flow of capital into economic developments. The immediate and direct provision of capital to industry is chiefly through the investment banker. The exchanges, however, are a useful and necessary supplement to the investment banker in the process of distributing new issues and in providing the channels through which the supply of capital can flow from the thousands of speculators and investors throughout the country into industry and commerce.

A subsidiary function is the evaluation of securities. This implies that the exchanges should produce, through the continuous process of evaluation, prices for securities as close as possible to investment prices based on present and future income-yielding prospects of the various enterprises capitalized at the appropriate

rate of interest. To obtain proper evaluation, trading should be restricted to those who base their actions upon study of long range movements of earnings and of the supply of new savings.

A third important function of the exchanges is the provision of ready marketability and reasonable price continuity. The quality of instant negotiability imparted by organized markets to securities, has the practical result of considerably enhancing the actual worth. The exchanges perform the function through bringing the buyer and seller together.

The index of Canadian common stock prices on an annual basis showed a yearly increment of 2.38 points from 1919 to 1936. The index was above the long-term trend for only six years of the eighteen - these were from 1926 to 1930 and again in 1936. The fluctuations were extremely sharp, the standard deviation from the line of long-term trend having been 34.75 points. The correlation with the index of the physical volume of business was remarkably close, the coefficient having been .95.

Bond Yields

Fluctuations in bond yields may be regarded as a significant business barometer in that they reflect the changes in the cost of money. The cost of capital is of equal concern to commercial and industrial borrowers. The availability of capital and of credit is ordinarily measured by the business man solely in terms of costs. The importance of a low yield basis in the encouragement of enterprise involving extensive capital expenditure may be indicated by an example. The expenditure for an iron and steel plant is placed by one promoter at \$100 million. If long term money is at 5 p.c., the annual interest charge against the plant would be \$5 million. Providing the project were delayed until low interest rates became obtainable, the annual charge would be reduced considerably. Assuming that the promoter could obtain the \$100 million at 4 p.c., the annual cost of interest would amount to \$4 million only. The difference of one million dollars would be available for additional expenses leading by the play of competition to higher prices for iron ore, coal and other materials. It is consequently self-evident that the lower the rate, the greater the encouragement to embark on the formation of capital in long-term projects. Expansion of credit whether short or long term may be brought about through low interest rates. Increase in the effective quantity of money or credit may signify either a larger amount outstanding or a more active use of the same amount. Under normal conditions, the increase in the outstanding credit will be reflected in higher prices or a greater volume of business or both. Abnormally low rates, therefore, have a profound effect in stimulating productive operations, while high rates tend to have the contrary effect.

As low money rates measured by bond yields are preeminently favourable to the expansion of business operations, an index of capitalised yields is an appropriate factor for comparison with other positive series. The index of capitalised bond yields occupied a moderately favorable position from 1922 to 1928, followed by adverse conditions until 1935. In recent years, the position has been again reversed. Probably never before in this country has such a volume of funds been available at such low rates for such a long period. The abnormally low bond prices in the immediate period following the war coupled with the high prices of the last three years has resulted in an annual increment of 2.75 points in the index of capitalised yields. As the standard deviation of the index from the line of secular trend was 9.43, it is evident that from the viewpoint of theory and practice, the interest rate plays a significant role in cyclical movements.

(x)

Economic Series Mentioned in the Foregoing Review. Indexes and cycles, (a) Trend Point of 1919;
 Business; and (d) Standard Deviation

		($\frac{a}{c}$)	($\frac{b}{d}$)	1919	1920	1921	1922	1923	1924
1	National Income	a 98.2	b +1.56	96.6	102.9	77.3	78.0	83.8	82.9
2		c .843	d 16.61	- 0.10	+ 0.37	- 1.07	- 0.94	- 0.49	- 0.45
3	Real Income	a 78.3	b +1.59	72.1	66.4	70.3	80.1	85.5	83.4
4		c .938	d 11.97	- 0.52	- 1.12	- 0.93	- 0.24	+ 0.08	- 0.23
5	Physical Volume of Business	a 78.4	b 1.71	71.3	75.0	66.5	79.1	85.5	84.6
6		c -	d 13.72	- 0.52	- 0.37	- 1.12	- 0.32	+ 0.002	- 0.17
7	Production of Producers Goods	a 78.8	b +1.07	65.1	75.0	60.8	75.8	84.9	80.4
8		c .985	d 19.20	- 0.71	- 0.26	- 1.14	- 0.32	+ 0.09	- 0.20
9	Production of Consumers Goods	a 74.7	b +2.36	74.3	71.9	69.4	79.0	82.4	85.3
10		c .977	d 7.65	- 0.05	- 0.67	- 1.31	- 0.35	- 0.22	- 0.14
11	Agricultural Production adjusted	a 89.5	b + .34	83.8	73.0	78.0	92.0	100.0	99.0
12	for price changes.	c .389	d 8.32	- .69	- 2.02	- 1.47	+ 0.18	+ 1.11	+ 0.94
13	Construction adjusted for changes	a 89.9	b - .90	56.2	75.2	70.0	92.4	85.0	79.6
14	in costs	c .888	d 35.23	- 0.96	- 0.39	- 0.51	+ 0.15	- 0.04	- 0.16
15	Industrial productivity per man.	a 109.9	b -3.06	102.5	99.9	125.6	134.1	130.2	132.7
16		c .607	d 7.19	- 1.45	- 2.24	+ 0.92	+ 1.67	- 0.70	+ 0.63
17	Railways, Gross Operating Revenues	a 103.3	b -2.12	82.8	99.7	92.8	89.3	96.9	90.3
18		c .938	d 13.84	- 1.48	- 0.11	- 0.46	- 0.56	- 0.14	+ 0.17
19	Railways, Net Operating Revenues	a 56.6	b ! .004	30.6	13.3	34.0	44.9	61.9	60.9
20		c .807	d 28.33	- 0.92	- 1.53	- 0.80	- 0.41	+ 0.19	+ 0.12
21	Carloadings	a 94.6	b -1.08	83.9	86.5	70.2	83.5	87.5	89.3
22		c .945	d 13.98	- 0.76	- 0.50	- 1.59	- 0.56	- 0.20	+ 0.01
23	Wage-Earners at work 1921-1936	a 91.9	b + .78	-	-	79.0	86.2	96.0	93.3
24		c .975	d 10.27	-	-	- 1.26	- 0.63	+ 0.24	- 0.10
25	Real Earnings in Manufacturing	a 89.2	b -1.14	87.2	89.0	91.5	93.6	95.6	98.9
26	(1919-1935)	c .156	d 2.25	- 1.38	- 1.11	- 0.49	- 0.44	+ 0.31	+ 1.29
27	Volume of Export Trade	a 75.6	b + .98	77.8	65.9	59.2	69.9	80.5	83.9
28		c .841	d 14.20	+ 0.15	- 0.76	- 1.30	- 0.61	+ 0.06	+ 0.23
29	Credits established abroad	a 93.2	b -1.30	91.3	95.3	64.6	69.3	79.3	82.8
30		c .901	d 16.99	- 0.11	+ 0.20	- 1.53	- 1.18	- 0.51	- 0.23
31	Wholesale Prices	a 125.9	b ~ 3.73	134.0	155.0	110.0	97.3	98.0	99.4
32		c .290	d 11.16	+ 0.73	+ 2.94	- 0.75	- 1.56	- 1.16	- 0.71
33	Common Stock Prices	a 72.1	b +2.39	65.7	66.9	57.8	62.6	68.5	70.6
34		c .951	d 34.75	- 0.18	- 0.21	- 0.53	- 0.47	- 0.37	- 0.37
35	Capitalized Bond Yields	a 80.0	b -2.75	88.3	79.9	81.1	89.7	95.5	97.1
36		c .260	d 9.41	+ 0.88	- 0.30	- 0.47	+ 0.16	+ 0.48	+ 0.36

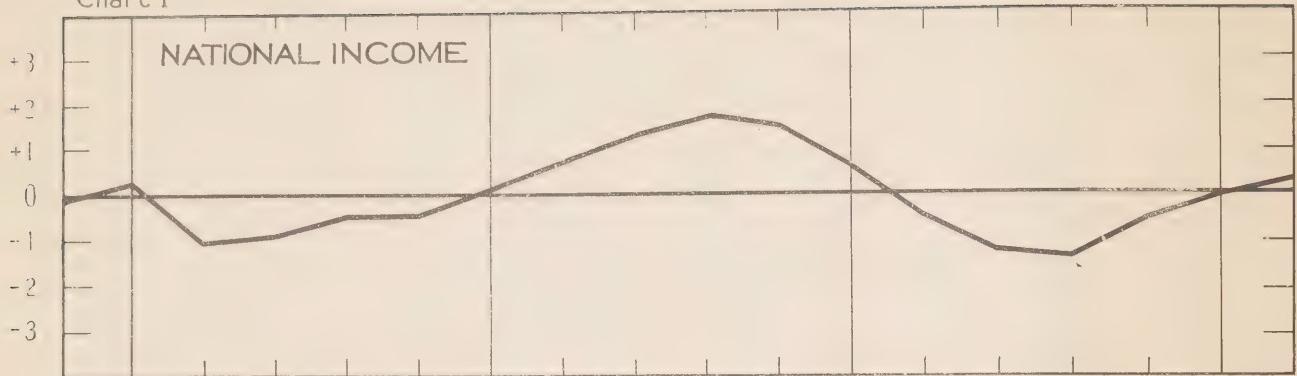
(1) See heading for significance of letters, a, b, c, d.

(2) Trend Point for 1921.

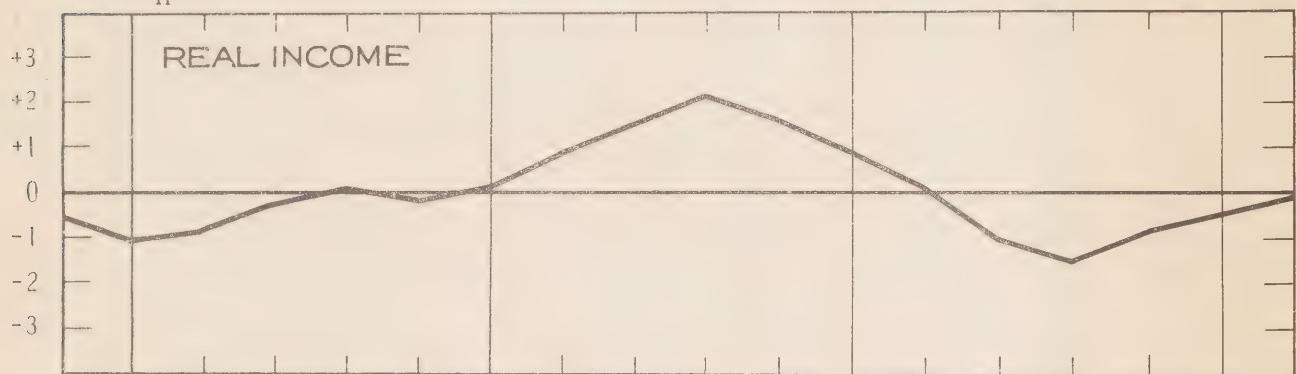
(b) Annual Increment; (c) Coefficient of Correlation with the Index of the Physical Volume of
from the Trend Based on 1919 to 1936.

1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	
91.3	100.0	107.2	113.2	108.4	91.6	70.7	57.8	54.8	65.4	70.3	77.6	1
+ 0.14	+ 0.76	+ 1.29	+ 1.75	+ 1.55	+ 0.63	- 0.54	- 1.22	- 1.30	- 0.57	- 0.18	+ 0.35	2
89.0	100.0	109.7	117.5	113.4	105.8	98.0	86.7	81.7	91.3	97.5	104.0	3
+ 0.10	+ 0.89	+ 1.56	+ 2.08	+ 1.60	+ 0.84	+ 0.05	- 1.03	- 1.58	- 0.91	- 0.53	- 0.11	4
90.9	100.0	106.1	117.3	125.5	109.5	93.5	78.7	79.7	94.2	102.4	112.2	5
+ 0.17	+ 0.71	+ 1.03	+ 1.72	+ 2.19	+ 0.90	- 0.39	- 1.60	- 1.65	- 0.71	- 0.24	+ 0.35	6
87.2	100.0	107.4	121.2	131.5	108.7	81.8	60.7	62.4	92.9	93.0	101.5	7
+ 0.10	+ 0.71	+ 1.04	+ 1.70	+ 2.19	+ 0.94	- 0.52	- 1.67	- 1.64	- 0.10	- 0.15	+ 0.21	8
90.7	100.0	100.2	108.5	114.3	106.8	101.2	93.5	96.2	104.9	107.6	118.1	9
+ 0.25	+ 1.16	+ 0.88	+ 1.65	+ 2.10	+ 0.81	- 0.22	- 1.54	- 1.49	- 0.67	- 0.63	+ 0.44	10
98.8	100.0	104.3	104.7	94.4	87.6	87.0	99.2	91.8	93.2	87.2	88.4	11
+ 0.88	+ 0.97	+ 1.45	+ 1.47	+ 0.18	- 0.67	- 0.79	+ 0.64	- 0.29	- 0.17	- 0.93	- 0.83	12
82.6	100.0	118.6	133.8	164.1	129.7	91.2	43.1	28.4	35.8	48.7	45.6	13
- 0.05	+ 0.17	+ 1.02	+ 1.48	+ 2.36	+ 1.41	+ 0.34	- 1.00	- 1.39	- 1.15	- 0.76	- 0.82	14
134.5	142.5	142.5	146.3	146.6	144.5	151.9	146.9	147.2	155.0	159.5	-	15
+ 0.45	+ 1.14	+ 0.71	+ 0.81	+ 0.43	- 0.29	+ 0.32	- 0.81	- 1.20	- 0.53	- 0.33	-	16
92.2	100.0	101.1	114.2	108.2	92.0	72.6	59.4	54.3	60.3	62.2	67.2	17
+ 0.12	+ 0.83	+ 1.06	+ 2.16	+ 1.89	+ 0.87	- 0.38	- 1.18	- 1.40	- 0.81	- 0.52	- 0.01	18
79.9	100.0	87.8	116.3	97.0	70.6	36.0	35.3	35.1	46.3	33.8	35.6	19
+ 0.82	+ 1.53	+ 1.10	+ 2.11	+ 1.43	+ 0.49	- 0.73	- 0.75	- 0.76	- 0.37	- 0.81	- 0.74	20
93.9	100.0	104.0	113.4	108.1	95.9	78.9	66.7	62.2	71.2	65.6	76.4	21
+ 0.41	+ 0.93	+ 1.29	+ 2.04	+ 1.74	+ 0.94	- 0.19	- 0.99	- 1.24	- 0.52	- 0.84	+ 0.01	22
94.3	100.0	103.9	109.3	118.9	109.7	98.2	84.5	82.6	96.4	100.2	111.8	23
- 0.07	+ 0.41	+ 0.71	+ 1.16	+ 2.02	+ 1.05	- 0.15	- 1.56	- 1.82	- 0.56	- 0.25	+ 0.80	24
97.5	100.0	101.0	103.2	104.3	100.6	106.5	104.3	100.8	106.0	109.8	-	25
+ 0.13	+ 0.76	+ 0.71	+ 1.16	+ 1.16	- 1.02	+ 1.11	- 0.36	- 2.44	- 0.62	+ 0.53	-	26
95.9	100.0	99.5	110.9	100.6	83.4	68.8	65.7	70.9	84.4	91.5	104.8	27
+ 1.01	+ 1.20	+ 1.12	+ 1.86	+ 1.06	- 0.22	- 1.32	- 1.59	- 1.31	- 0.42	+ 0.07	+ 0.87	28
97.2	100.0	100.3	113.7	103.5	81.6	64.5	52.6	49.8	59.0	68.5	82.6	29
+ 0.69	+ 0.94	+ 1.03	+ 1.90	+ 1.37	+ 0.16	- 0.77	- 1.39	- 1.48	- 0.87	- 0.23	+ 0.68	30
102.6	100.0	97.7	96.4	95.6	86.6	72.1	66.7	67.1	71.6	72.1	74.6	31
- 0.08	+ 0.02	+ 0.14	+ 0.37	+ 0.63	+ 0.15	- 0.81	- 0.96	- 0.59	+ 0.14	+ 0.53	+ 1.08	32
80.7	100.0	123.4	159.6	190.7	136.2	85.2	55.6	68.6	85.7	93.7	119.2	33
- 0.16	+ 0.31	+ 0.93	+ 1.35	+ 2.65	+ 1.06	- 0.14	- 1.33	- 1.03	- 0.62	- 0.47	+ 0.18	34
99.9	100.0	105.2	107.1	98.4	102.7	105.6	95.1	105.7	122.9	135.8	149.3	35
+ 0.36	+ 0.09	+ 0.34	+ 0.31	- 0.97	- 0.80	- 0.78	- 2.19	- 1.35	+ 0.18	+ 1.26	+ 2.40	36

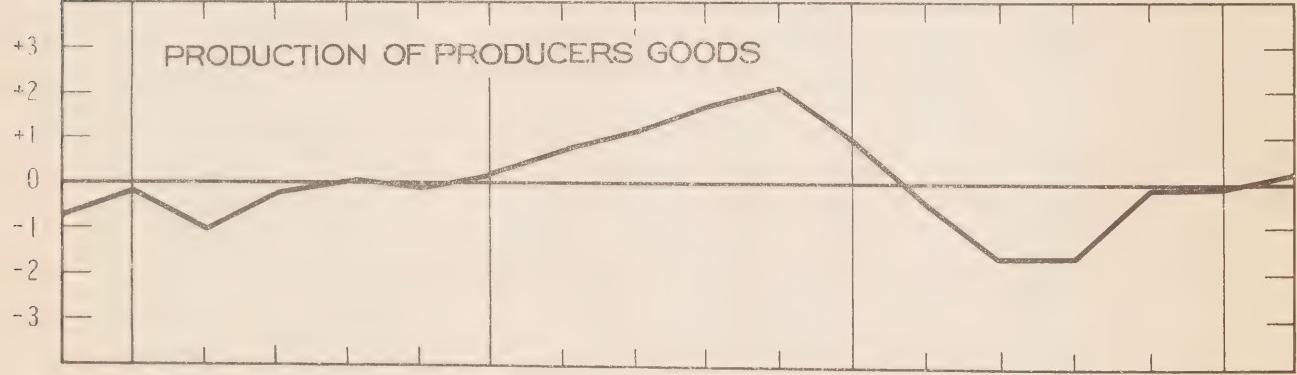
Chart I



- II



- III



- IV

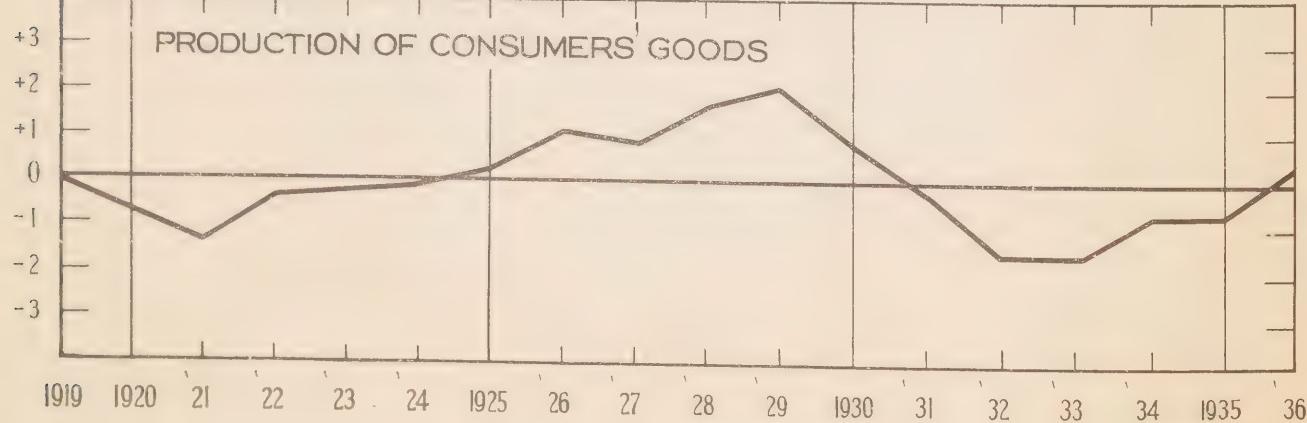
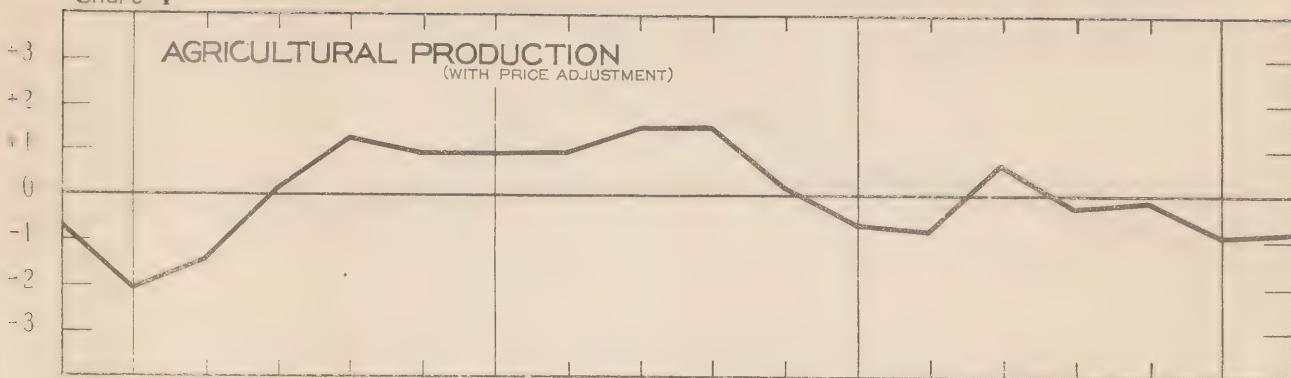
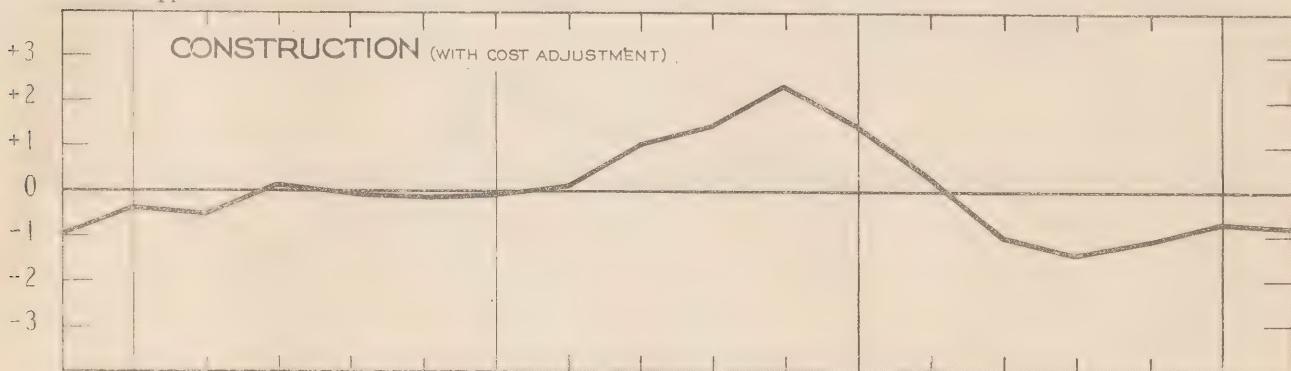


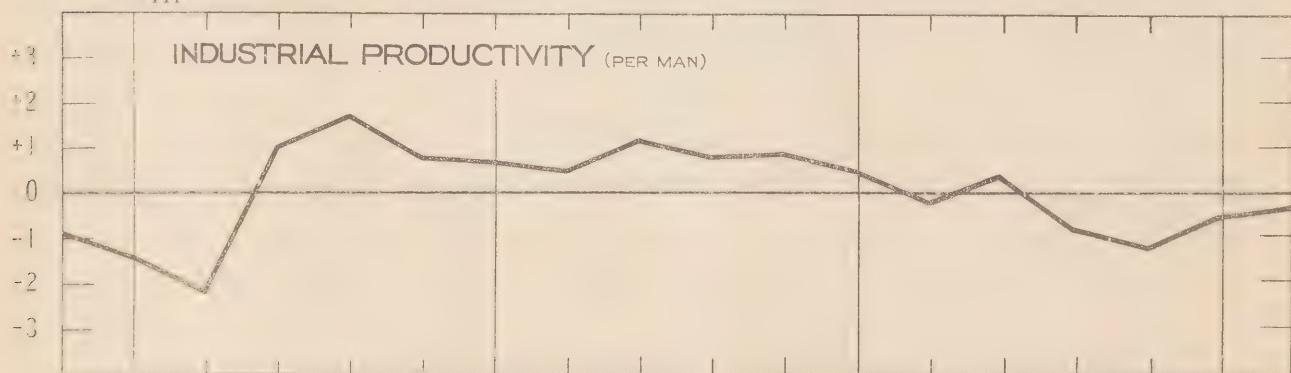
Chart V



-VI



-VII



-VIII

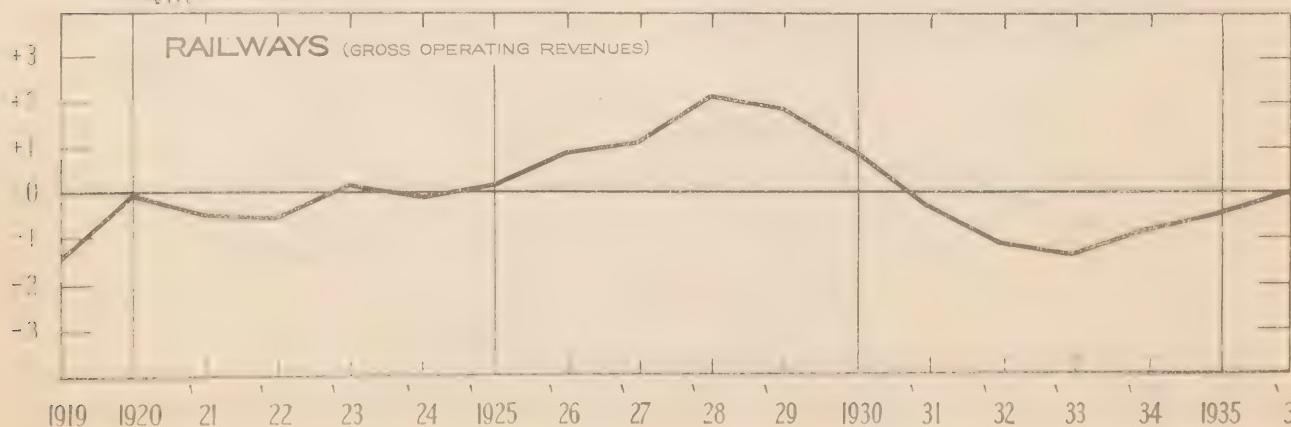
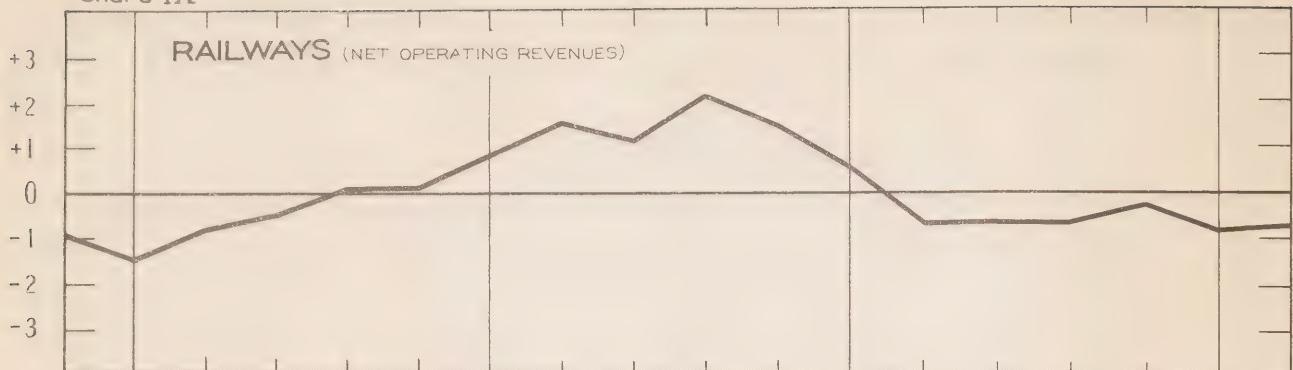
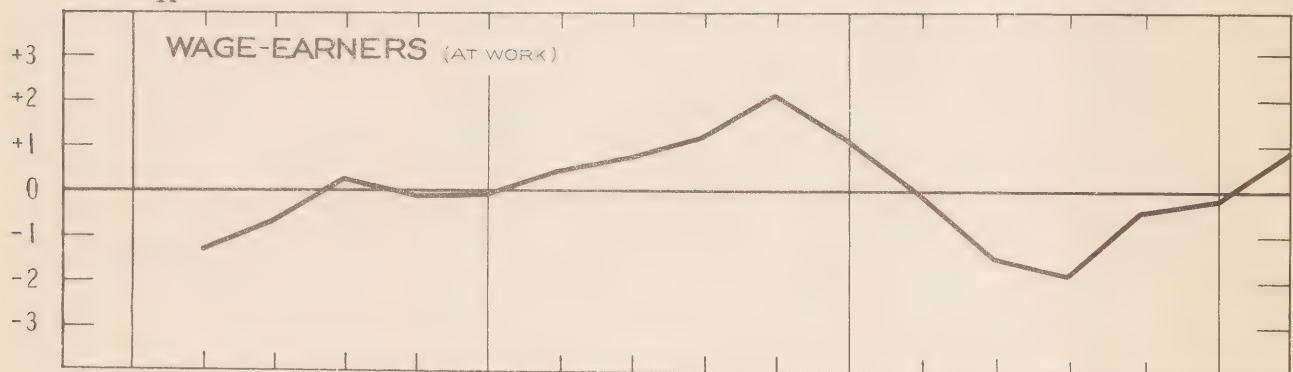


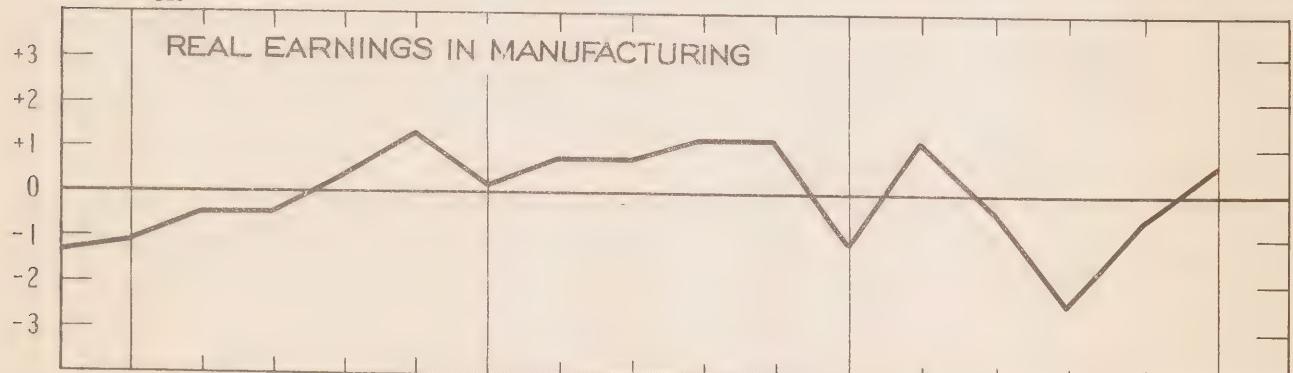
Chart IX



- X



- XI



- XII

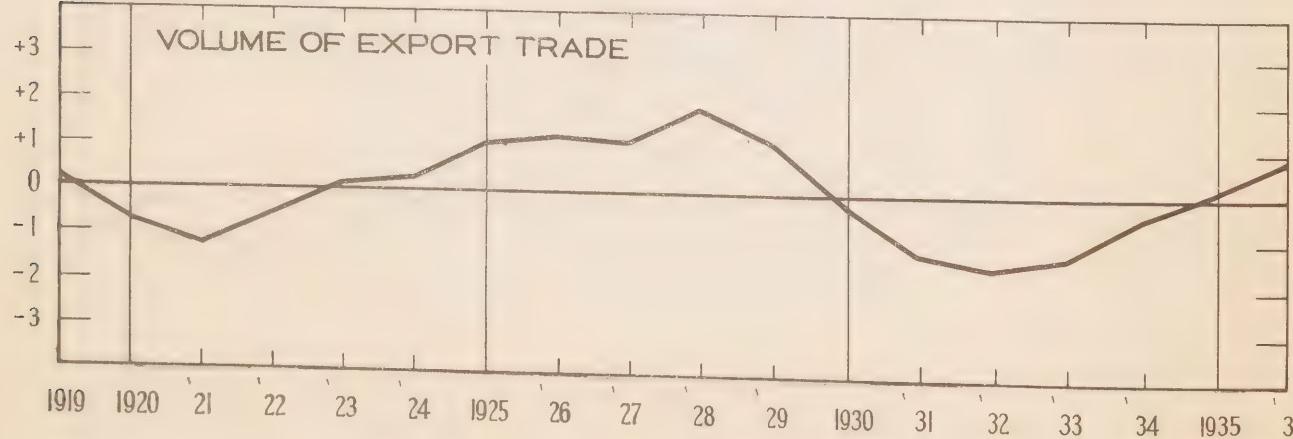
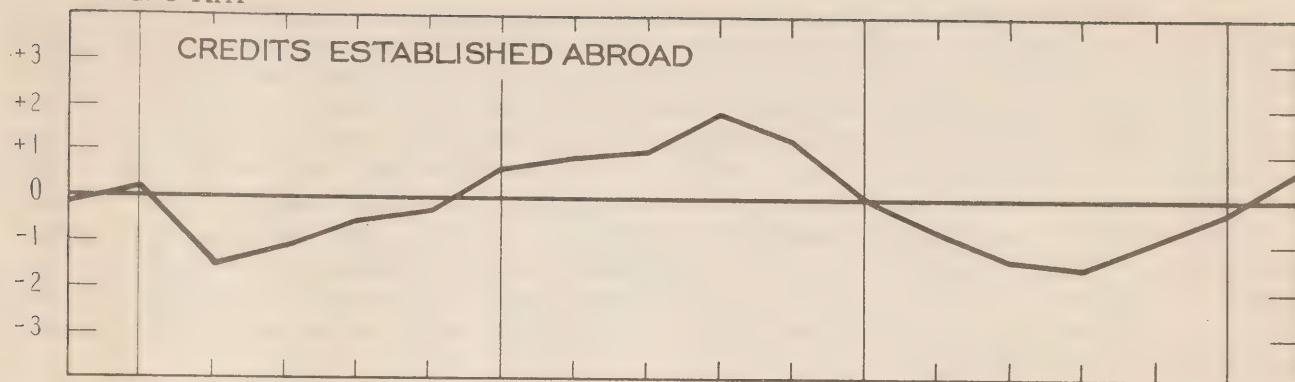
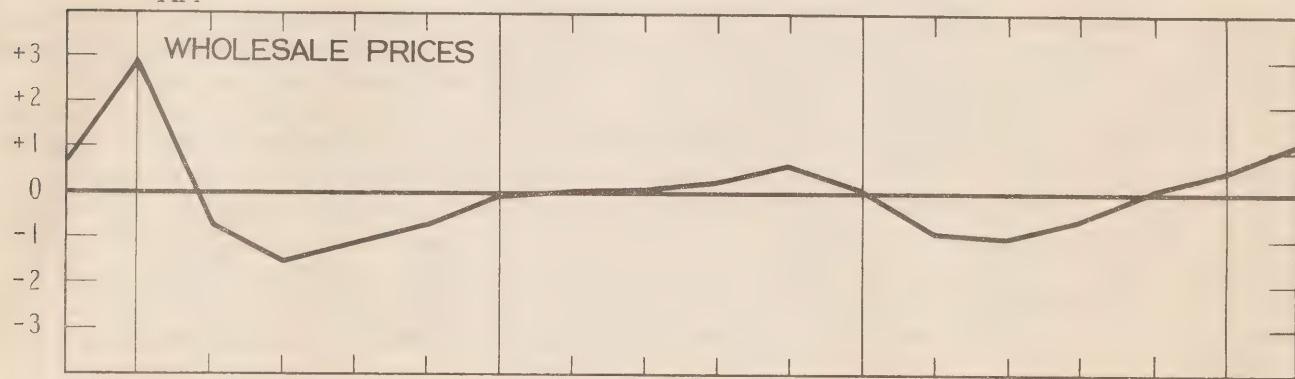


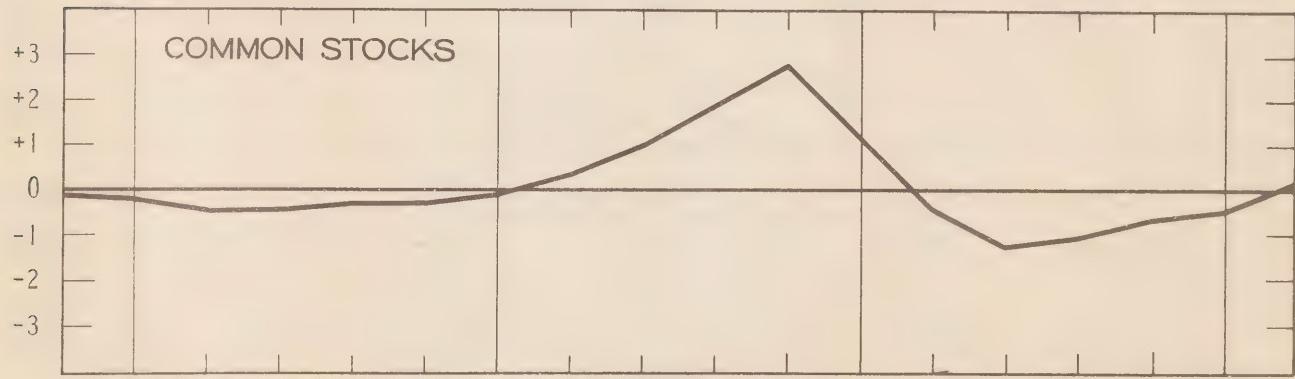
Chart XIII



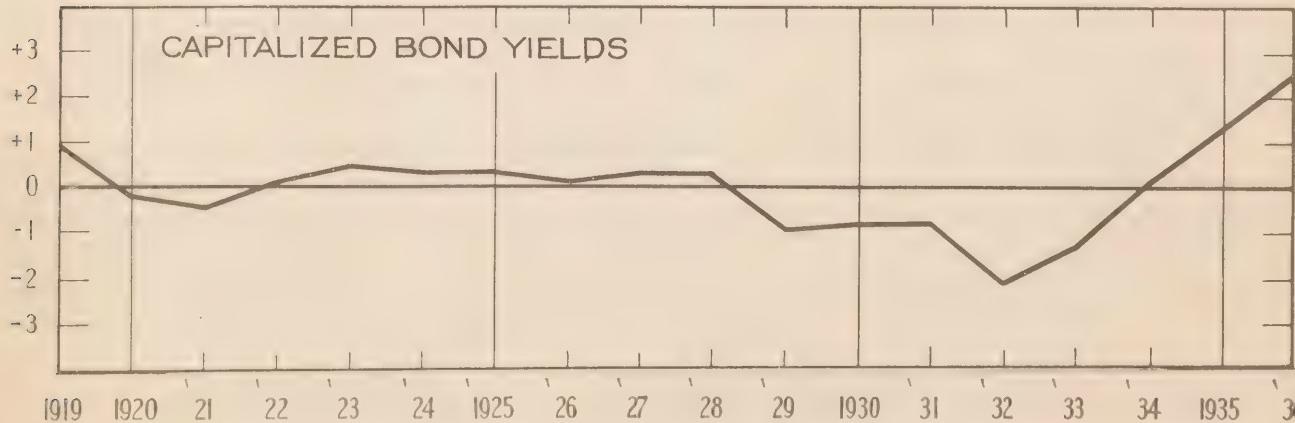
-XIV



-XV



-XVI



1919 1920 21 22 23 24 1925 26 27 28 29 1930 31 32 33 34 1935 36

DESCRIPTION OF METHOD

For the tables in the main body of the report, the computation relates to the period from 1919 to 1934, the annual figures having been reduced to index numbers, (1926 = 100). In the case of Public Finance reported by fiscal years, the figures have been moved back to the nearest calendar year to facilitate correlation with the business index. The use of annual figures eliminates the problem of seasonal fluctuations and provides a bird's-eye view of a considerable part of the economic field. Business executives are accustomed to the year as a favorable time unit for accounting and appraisal of operations. Monthly statistics, however, are valuable for current analysis and in establishing forecasting sequences. The results of the present study should be useful in formulating a plan for more detailed research; in such a further study, a limited number of series on a monthly basis could be selected for intensive mathematical treatment.

The main object of the present bulletin is the analysis of economic fluctuations. Consequently the first step is to eliminate the influence of the long-term trend. It is assumed for this purpose that the post-war trend for any particular series may be represented by a continuous straight line. The determination of what the trend line will be consists in finding the constants for the equation of the line which we may postulate as $Y = a + bX$. No one line passes through all the points of any of the time series used in this connection and there is the necessity of finding by mathematical process a compromise line which will come as near as possible to agreeing with the given data. This is the method of least squares. Although the process of determining the values of the constants 'a' and 'b' by this method is somewhat complicated, it takes all the observations into account and gives each an equal weight.

We use the formula (1) $\sum y = na + b \sum (x)^1 /$

and (2) $\sum xy = a \sum (x) + b \sum (x^2),$

the symbols employed having the following meanings:

$\sum (y)$: the sum of the values of y.

$\sum (x)$: the sum of the values of x.

$\sum (xy)$: the sum of the products of the paired x's and y's.

$\sum (x^2)$: the sum of the squares of the values of x.

and n : the number of pairs of values.

The work of computation is facilitated by a tabular arrangement using 1926, the middle point, as the origin. The values of "x" represent the time factor, while the values of "y" are, in this case the corresponding indexes of the physical volume of business.

Year	x	y	xy	x^2
1919	-7	71.3	-499.1	49
1920	-6	75.0	-450.0	36
1921	-5	66.5	-332.5	25
1922	-4	79.1	-316.4	16
1923	-3	85.5	-256.5	9
1924	-2	84.6	-169.2	4
1925	-1	90.9	-90.9	1
1926	0	100.0	0	0
1927	+1	106.1	106.1	1
1928	+2	117.5	234.6	4
1929	+3	125.5	376.5	9
1930	+4	109.5	438.0	16
1931	+5	93.5	467.5	25
1932	+6	78.7	472.2	36
1933	+7	79.7	557.9	49
1934	+8	94.2	753.6	64

 $(n = 16)$

$$\text{Totals } \sum x = +8 \quad \sum y = 1,457.4 \quad \sum xy = +1,291.8 \quad \sum x^2 = 344$$

Substituting in (1) of the above formulae

$$\sum y = na + b\sum x$$

we have

$$1,457.4 = 16a + 8b.$$

and in (2)

$$\sum xy = a\sum(x) + b\sum(x^2)$$

we have

$$1,291.8 = 8a + 344b.$$

When formula (2) is multiplied by 2 to solve for "b", the simultaneous equation

gives

subtracting

$$\begin{array}{r} 2583.6 = 16a + 688b \\ 1457.4 = 16a + 8b \\ \hline 1126.2 = 680b \end{array}$$

$$\therefore b = 1.656.$$

Substituting in (1)

$$a = \frac{1457.4 - 8(1.656)}{16} = 90.26$$

Thus the annual increment or the amount of annual change in the value of the independent variable is found to be +1.656 while "a" the point of origin at 1926 is 90.26. From this centre the trend line can be extended back to 1919 by subtracting 7 times the annual increment and brought forward to 1934 by adding 8 times the increment.

Having established the secular trend we next apply the original data to the trend to find the differences between the original data (OD) and secular trend (ST) lines and as the standard deviation is the square root of the arithmetic mean of the squares of deviations of values of the variable from the arithmetic mean, (in this

case, the secular trend line^{1/}, the next step gives a standard deviation (σ) of 14.47.

Year	Original Index	Secular Trend (b. +3,656)	Differences	Differences Squared
1919	71.30	78.64	- 7.34	53.876
1920	75.00	80.30	- 5.30	28.090
1921	66.50	81.96	-15.46	239.012
1922	79.10	83.62	- 4.52	20.430
1923	85.50	85.28	+ 0.22	0.048
1924	84.60	86.94	- 2.34	5.476
1925	90.90	88.60	+ 2.30	5.290
1926	100.00	90.26	+ 9.74	94.868
1927	106.10	91.92	+14.18	201.072
1928	117.30	93.58	+23.72	562.638
1929	125.50	95.24	+30.26	915.668
1930	109.50	96.90	+12.60	158.760
1931	93.50	98.56	- 5.06	25.604
1932	78.70	100.22	-21.52	463.110
1933	79.70	101.88	-22.18	491.952
1934	94.20	103.54	- 9.34	87.236
Total			Sum of differences squared =	3353.130
			Dividing by the number of items (16) =	209.571
			the square root of which is the standard deviation (s) =	14.47

The measure of the proportion of the variation in one variable (e.g. index of physical volume of business) which is associated with another variable (e.g. common stock prices) is called the coefficient of correlation. The symbol "r" is used to represent it. It is a measure of the closeness of the relationship between the two factors.

Each factor in this study has been subjected to the same treatment. For example, the index of common stock prices for the period from 1919 to 1934 has a standard deviation of 36.47, an annual increment of +2.70 and an origin at 1926 of 91.01.

In a case where $r = +1.0$, perfect correlation exists and -1.0 denotes perfect inverse correlation. Thus the limits of correlation are +1.0 and -1.0, and the following nomenclature of the degrees of correspondence between two economic series is used:-^{2/}

- Over 0.90, excellent.
- From 0.80 to 0.90, very good.
- From 0.70 to 0.80, good.
- From 0.60 to 0.70, fair.
- From 0.50 to 0.60, rather low.
- Below 0.50 very low or not significant.

According to R. A. Fisher's "Statistical Methods of Research Workers" (p. 196), the largest value of r for which the correlation is significant is .497.
^{1/} Persons: Indices of General Business Conditions, p. 196. ^{2/} Wm. A. Berridge, Cycles of Unemployment, page 24.

where there are fourteen degrees of freedom. The number of degrees of freedom is taken as 2 less than the number of pairs or years in the sample which in this instance is 16.

The "probable error" of a correlation coefficient means so little when applied to time series of economic data, that it was omitted from the present study. Of course, in all correlation analysis the larger the sample the greater the chance of exceptional items cancelling out and the more significant the degrees of correspondence or co-variation.

Having the annual difference between the original data and the secular trend, and also the standard deviations, the correlation between two factors is found by adding the product of these differences and dividing the result by the product of the standard deviations and the number of pairs of variables, i.e. the number of yearly indexes.

$$\text{Formula} \quad \frac{(x_1 - y_1)(x_2 - y_2)}{n \sigma_1 \sigma_2}$$

Year	Index of Business Difference between OD and ST (1)	Index of Common Stocks. Difference between OD and ST (2)	(1) x (2)
1919	- 7.34	- 6.41	+ 47.0494
1920	- 5.30	- 7.01	+ 41.9230
1921	-15.46	-19.71	+ 304.7166
1922	- 4.52	-17.61	+ 79.5972
1923	+ 0.22	-14.41	- 3.1702
1924	- 2.34	-15.01	+ 35.1234
1925	+ 2.30	- 7.61	- 17.5030
1926	+ 9.74	+ 8.99	+ 87.5626
1927	+14.18	+29.69	+ 421.0042
1928	+23.72	+63.19	+ 1498.8668
1929	+30.26	+91.59	+ 2771.5134
1930	+12.60	+34.39	+ 433.3140
1931	- 5.06	-19.31	+ 97.7086
1932	-21.52	-51.61	+ 1110.6472
1933	-22.18	-41.31	+ 916.2558
1934	- 9.34	-26.91	+ 251.3394
Totals "+" and "-"			+ 8096.6036
			- 20.6732
			+ 8075.9304

$$n = 16$$

$$\text{Business} \quad \sigma_1 = 14.47$$

$$\text{Common Stocks} \quad \sigma_2 = 36.47$$

Substituting in the formula above,

$$\frac{8075.9304}{16 \times 14.47 \times 36.47} = + .956$$

The coefficient of correlation between the physical volume of business and common stock prices over the sixteen year period is thus found to be + .956, which signifies excellent correlation.

Explanation of Tables

The significant results of this bulletin are presented in twenty tables. The objective was to analyze the intermediate fluctuations of a considerable number of economic series during the post-war period. An attempt was made to give sufficient information in the tables making it possible for the investigator to reproduce the mathematical process.

Indexes or relatives

The starting point consisted in expressing each factor as a percentage of the total for the base year of 1926. These indexes or relatives are presented in the tables by years for the post-war period, and this information in itself should prove of considerable value for ready reference.

The Period

While an effort was made to present the data by calendar years from 1919 to 1936, employment indexes were available for years after 1920 only and public finance statistics apply to fiscal years ended March 31. In the latter case data are presented under the heading of the nearest calendar year. In the introductory table A, the analysis was based on eighteen years from 1919 to 1936, while in the tables in the main body of the report the period was limited to fourteen years ended 1934. For the employment data given in Table II, the computation was based on the sixteen-year period from 1921 to 1936, and while the results for the 22 series in the table may be compared with each other, there is not strict comparability with other tables, especially in regard to the annual increment.

(a) The trend point for 1919 or first year of the post-war period for which statistics were available, is tabulated under (a).

(b) The annual increment of the trend line is given as (b). With the use of the initial point (a) and the annual increment (b), it is a simple matter to ascertain the annual points through which the long-term trend line passes. The annual change in the trend is a measure of post-war progress on a broad economic front, presenting a composite picture of advance and decline.

(c) The coefficient of correlation between the particular series and the index of the physical volume of business is represented by (c). The coefficient indicates the extent to which the factor conforms to the predominant cyclical movement.

(d) The number represented by (d) is the standard deviation of the given index from its long term trend. This number measures the amplitude of the fluctuation. Comparisons between the standard deviations of the different indexes are most significant.

Cycles

The quotients obtained by dividing the standard deviations into the actual deviations are technically known as "cycles" and these trace the course of intermediate fluctuations placed upon a common footing by this device, and are a valuable instrument in economic interpretation.

Charts

The "cycles" as described above are presented in graphical form facilitating ready comparisons between the fluctuations of more than 300 factors. A special page showing the index of the physical volume of business on transparent paper was inserted. Using the light-box technique, - superimposing one of these sections on the various indexes - some idea of the relationship may be obtained.

There is no positive justification for the assumption that the results reported under (a), (b), (c) and (d) will necessarily be maintained in the future. The data were obtained for a definite period and no projection for subsequent years is recommended. In the main tables, however, indexes and cycles, for the sake of including the latest information, are given for 1935 and 1936.

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P R E F A C E

L'économie canadienne de la période d'après guerre montre une diversité frappante. Malgré les chocs de deux dépressions majeures, le volume de production montre un gain marqué au cours des dix huit ans. Plusieurs groupes industriels, basés sur les ressources naturelles, ont rapidement pris de l'expansion, ce qui a plus qu'absorbé les reculs dans les autres groupes. Four vedette parmi les premiers, les industries papetières, minières et énergétiques. Le gain annuel de leur production allant de 4 à 9 pour cent. Les progrès de l'agriculture ont été modérés, aucune récolte de grain n'ayant été supérieure aux huit années dernières. Le gain annuel des industries manufacturières est généralement limité à environ 1,5, tandis que la construction et le trafic ferroviaire déclinent. Bien qu'il y ait avance dans la production générale, il y a beaucoup d'inégalité dans les progrès d'industries diverses.

L'expansion industrielle a été maintenue en face de la contraction des prix des commodités. Pendant les treize années terminées en 1933, la marche des prix pointait vivement à la baisse, contre relâchant l'inflation résultant des financements de guerre. L'indice a décliné de 164 en mai 1920 à 65,5 en février 1933 et la dislocation a été accentuée par la concentration de la plus grande partie de la déflation en deux périodes relativement courtes. Une autre considération sérieuse a été le bas prix des matières premières comparativement à celui des articles œuvrés. La plus grande partie de la période sous revue, les producteurs primaires ont été désavantageés par les limitations du pouvoir d'achat.

Les fluctuations de course durée ont été plus extrêmes qu'en toute autre période de l'histoire du Canada. La déflation des prix des commodités a été un des principaux éléments de la première dépression d'après guerre, tandis que la deuxième a été caractérisée par la contraction des valeurs spéculatives. Bien que ces développements aient été les plus frappants, presque tous les secteurs de l'économie sociale ont participé aux fluctuations. L'avance et le déclin de la production ont été accompagnés en grande partie par un mouvement parallèle des prix, et, comme d'ordinaire, les fluctuations des marchandises pour producteurs ont été plus marquées que celles des marchandises pour consommateurs.

Le but du présent bulletin est d'aider dans l'interprétation de quelques-unes des séries qui touchent de près au bien-être matériel du Canada. Environ 350 séries ont été soumises à l'analyse statistique dont les résultats sont présentés dans les tableaux et graphiques qui suivent. L'analyse a consisté à (1) déterminer la course à long terme, (2) mesurer l'ampleur des fluctuations d'après cette course et (3) calculer la relation entre les fluctuations de chaque série avec celles de l'indice du volume physique des affaires, considéré comme une des meilleures mesures du cycle typique. Les méthodes familières d'ajustement à la courbe de déviation standardisée et de corrélation ont été employées en la matière.

Le présent bulletin est le cinquième dans une série publiée comme arrière-plan des données de la Revue Mensuelle. Le premier donnait un nombre de séries par année et par mois, de 1919 à 1930. Le deuxième et le troisième présentaient des indices mensuels et des données originales à préparer en connexion avec la compilation des indices des affaires, paraissant à la page II de la Revue. Le quatrième supplément présentait les données annuelles sur environ 1 400 séries, avec le calcul du pourcentage de la moyenne de changement annuel au cours de la période de quinze ans.

Le présent supplément de la Revue Mensuelle de la Situation Economique a été préparé par Sydney B. Smith, M.A., et H. A. Brown, M.A., du personnel du Bureau.

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Malgré des fluctuations économiques prononcées, la marche ascendante de la plupart des facteurs commerciaux indique, au cours de la période d'après-guerre, une mesure passable de progrès national au Canada. La majorité des quarante-six éléments de l'indice officiel ayant enregistré une tendance à la hausse sur une longue période, les opérations commerciales en ont gagné en volume. Grâce surtout à l'activité des industries minière, papetière et de l'énergie électrique, la capacité industrielle a pris beaucoup d'envergure. Comme une proportion croissante de l'entreprise canadienne a été consacrée à la création d'usines et à la production de leur outillage plutôt qu'à la production de denrées pour la consommation, l'économie a été plus sujette aux vastes fluctuations. L'inflation du numéraire, issue des financements de guerre a aussi exercé une influence dans le même sens. Bien qu'inévitable en raison des conditions existantes, le fléchissement des prix des commodités a été l'un des principaux développements adverses.

La période d'après-guerre constitue une ère relativement homogène de grand intérêt économique. Les données statistiques sont plus abondantes que pour les années antérieures et une étude de la période fournit une base utile à l'interprétation de l'économie courante.

Revenu national

Dans la mensuration des fluctuations économiques sur une base annuelle, les estimations du revenu national sont d'une importance primordiale. En fonction des niveaux existants des prix, ces estimations constituent les plus importantes aussi bien que les plus étendues de toutes les statistiques économiques, parce qu'elles sont le meilleur indicateur possible du bien-être matériel d'une nation. La somme de revenu national, divisée par la population qui en tire sa subsistance afin d'en établir un chiffre per capita, constitue la preuve ultime des conditions générales de vie et du bien-être dans le pays sous étude. De plus, le pourcentage du revenu national global représenté par la somme totale des taxes imposées devient le meilleur baromètre connu du degré de solvabilité d'une nation.

Ainsi les statistiques du revenu national constituent la pierre de couronnement de tout système national de statistiques. A la vérité, on peut juger plus facilement de la qualité et de l'efficacité d'un système de statistiques de tout pays par les facilités qu'il offre de calculer la somme du revenu national et l'étendue de sa distribution parmi les différentes parties du pays et parmi les diverses classes de la population.

La méthode principale de calculer le revenu national du Canada est de faire un relevé annuel des valeurs créées par les principales industries et telles que révélées par le recensement de l'industrie s'étendant aux neuf groupes occupés à la production de commodités. Au moyen de ce relevé des valeurs créées par les cinq huitièmes de la population active occupée à de tels travaux une estimation est faite de la production des trois autres huitièmes. Cette dernière partie de la population active est occupée à la création d'utilités de place et de temps, et par les services qu'elle rend, elle est présumée aussi productive que le groupe engagé dans la produc-

tion des utilités de forme.

Après la courte période d'activité de 1919 à 1920, le revenu national, exprimé en termes de valeur, a tombé au niveau relativement bas de \$4,500,000,000 en 1921. Vinrent ensuite sept années d'expansion dont le maximum de \$6,594,000,000 fut atteint en 1928. A cause surtout du déclin dans la production agricole nette, le total pour 1929 a été quelque peu inférieur à celui de l'année précédente. Le déclin s'est continué jusqu'en 1933 pour atteindre alors le minimum de \$3,193,000,000. Les trois années de 1934 à 1936 inclusivement, une avance marquée s'est fait sentir. Après élimination de la tendance à long terme, une étroite corrélation ($r = .843$) s'est établie entre ce facteur et l'indice du volume physique des affaires tel que publié dans la Revue Mensuelle de la Situation Economique. La période de 1921 à 1935 ayant été divisée en trois parties bien définies d'à peu près égale durée, les contours des deux facteurs avaient plusieurs points de ressemblance. La fluctuation du revenu national a été plus grande que celle de l'indice des affaires, tel qu'indiqué par une déviation standardisée de 16.61 comparativement à 13.72. Dans cette compilation, les deux facteurs ont été exprimés en pourcentage de l'année de base 1926, les données annuelles servant dans les deux cas.

Revenu réel

Le revenu national étant mesuré en dollars, il importe de reconnaître que les changements dans le niveau des prix exercent une influence importante dans l'établissement des fluctuations qui se produisent dans les estimations. Bien que les indices disponibles des prix ne soient pas suffisamment représentatifs pour permettre un ajustement exact des estimations du revenu aux changements de prix, l'indice des prix de gros donne une idée générale de l'influence des prix. Ainsi, lorsqu'on se sert du nombre-indice officiel des prix pour ajuster l'estimation de la valeur-argent du revenu national aux changements de prix, on constate qu'une somme de \$66.70 achetait en moyenne autant de commodités en 1932 qu'une somme de \$95.90 en 1929. Si la valeur-argent du revenu national a décliné de moitié au cours de ces trois années, l'ajustement nécessaire par la baisse des prix réduira le déclin du revenu national réel provenant des commodités et des services à 28.3 p.c. seulement.

Si nous nous servons de l'indice des prix de gros pour dégonfler les estimations du revenu national, nous trouvons que les résultats pour certaines années ont beaucoup changé. Le revenu national exprimé en dollars était relativement élevé en 1920, tandis qu'il en était bien autrement du revenu réel. Le revenu réel était légèrement au-dessus de la normale en 1923, tandis que le revenu national exprimé en termes monétaires était beaucoup plus bas. L'estimation préliminaire du revenu national pour 1936 avait de beaucoup meilleure apparence que le revenu ajusté aux changements de prix. Comme l'indiquent les déviations standardisées de 16.6 et 12.0 pour les deux indices respectivement, la fluctuation du revenu national a été plus prononcée dans la forme monétaire que dans l'autre. Le revenu réel s'est accru annuellement de près de 1.6 p.c. au cours de la période d'après-guerre.

Production

La production joue un rôle très important dans l'interprétation des conditions économiques. Dans un sens spécial, la prospérité et la dépression sont, dans l'économie du profit, étroitement liées aux fluctuations du volume de la production, et la prospérité est regardée comme une fonction de la proportion dans laquelle le personnel et l'outillage industriel sont utilisés. Les données composites de la production occupent une position centrale dans le travail d'analyse. Par l'examen de la relation entre l'indice des affaires et les autres facteurs économiques fondamentaux, un ordre historique pourrait être établi qui serait d'une très grande valeur dans les

pronostics. Parmi les facteurs comparables de ce genre il y a les prix de gros, le rendement capitalisé des obligations, les dépôts des banques et le cours des actions ordinaires. Une analyse comparative de ces facteurs donnerait de meilleurs résultats qu'une étude isolée de la course de chacun.

L'indice du volume physique des affaires est basé sur 46 facteurs représentant la production minérale, les manufactures, la construction, l'énergie électrique et la distribution. Chacun de ces facteurs, ajusté pour tendances saisonnières, a été multiplié par le prix moyen de 1926. Les produits de cette opération ont été additionnés de façon à donner, aux prix moyens de 1926, une valeur totale de la production des facteurs à l'étude au cours de tout mois donné. La valeur de la production pour tout mois, compilée de cette façon, a été exprimée en pourcentage de la valeur moyenne au cours de l'année de base 1926. La méthode aggrégative telle qu'employée dans la compilation est facile à comprendre et elle a, en outre, l'avantage d'être libre des mirages de la statistique.

Bien qu'au Canada un recensement de l'industrie soit fait chaque année les résultats obtenus ne sont pas suffisamment courants pour répondre aux exigences d'une interprétation économique. Il est donc nécessaire de recourir aux statistiques mensuelles de la production, et la coutume veut que l'on s'en rapporte plutôt à des échantillons représentatifs qu'à une couverture complète. D'après la pratique ordinaire l'indice est limité aux industries qui réagissent aux forces des fluctuations économiques. Un indice standardisé a été établi auquel ont été comparés les autres facteurs de cette étude. Le coefficient de corrélation de Pearson a été supposé entre l'indice des affaires et 350 environ autres séries.

Aux fins de cette introduction, l'indice des affaires a été analysé pour la période des 18 ans de 1919 à 1936. Au cours de cet intervalle l'accroissement annuel a été de 1.71 points et la deviation standardisée de 13.72 points. De 1919 à 1925 l'indice a été presque constamment au-dessous de la course à long terme.

Matières de production et matières de consommation

L'une des principales causes de fluctuation économique est le changement apporté au volume des achats de produits durables par les entreprises commerciales, motivé par le changement des perspectives de profits. Le volume des produits bruts et intermédiaires achetés par les entreprises commerciales est considérable comparativement à celui des achats de même produits par des consommateurs individuels. Les achats de ces derniers, ne pouvant être différés bien longtemps, sont, pour la plupart, obligatoires. L'achat de produits durables est facultatif puisqu'il peut être différé en raison des longs services que l'on est toujours en mesure de prolonger la durée et les services de ceux qui sont déjà en usage. Ainsi l'indice de rendement en matières de production sur la base de 1926 a avancé de 60.8 en 1921 à 131.5 en 1929. Bien qu'il ait décliné à 60.7 en 1932, la marche générale montrait un accroissement annuel de 1.07 p. cent dans la période de 18 ans, et il y avait un rétablissement à 101.5 en 1936. La production de matières de consommation n'ayant pas été sujette à une aussi vaste fluctuation, accusait un accroissement annuel plus considérable pour la période en question. L'indice avança de 69.4 en 1921 à 114.6 en 1929 pour décliner ensuite à 93.5 en 1932. L'accroissement annuel de l'indice de 1919 à 1936 fut de 2.4 points.

Dans l'étau de la vaste fluctuation qu'a subie la production au cours de la période d'après guerre il convient de ne pas oublier la plus grande variété du rendement. L'entreprise s'est sensiblement éloignée de la production des nécessités immédiates de la vie, comme la nourriture, le vêtement et le logement essentiel. La demande pour les commodités de ce groupe est relativement infastigieuse. Le cas est bien

différent pour les instruments de production et diverses matières durables et non durables répondant à des besoins moins urgents. Comme les matières durables et les matières non essentielles de consommation se sont emparées d'une place importante dans la production totale, la demande est plus susceptible d'expansion ou de contraction rapides selon la fluctuation correspondante dans l'activité productive. Au cours de la période d'accélération du dernier cycle il y eut dans la production totale une avance remarquable dans la proportion de matières durables. Le progrès du standard de vie a donné lieu à une hausse graduelle dans l'importance relative du confort et du luxe comparativement aux strictes nécessités dans le volume global des matières produites. Le contraire s'est produit au cours de la longue période de dépression qui vient de se terminer.

Agriculture

Parallèlement à l'augmentation du bien-être économique à travers le monde depuis les débuts du siècle il s'est produit un changement dans la nature des services demandés. La demande pour les produits agricoles est relativement inélastique. Par conséquent, de pair avec chaque amélioration apportée à la technique agricole, par laquelle la production d'un article quelconque augmentait plus vite que la consommation, celle-ci dépend principalement en retour de l'accroissement de la population, les ressources ont passé de l'agriculture à l'industrie, au commerce et aux divers services professionnels. Le transfert des ressources de l'agriculture s'est continué depuis la guerre. Du point de vue général, la consommation de céréales a décliné tandis que la demande pour les fruits et les produits laitiers a augmenté considérablement.

Le climat défavorable dans l'Ouest du Canada depuis les huit dernières années a fait décliner en moins la moitié la moitié la production agricole. Même après que la valeur brute de la production agricole a été dégagée du facteur prix, l'accroissement normal de l'industrie en résultant n'est que de 1% de point. La valeur réelle de la production agricole, ayant été relativement élevée de 1922 à 1929, a contribué à la prospérité générale de la période. Sans compter l'an de 1932, la dépression agricole a été continuée les sept années terminées en 1936. Malgré la disparité entre les fluctuations des marchés de l'agriculture et l'industrie et volume physique des affaires, les effets des conditions climatiques sont évidents. Le coefficient n'a été que de .39, indiquant qu'il n'y a aucune corrélation significative entre les deux facteurs.

Construction

Les fluctuations dans les périodes de l'industrie du bâtiment sont imputables à plusieurs influences. De prime importance sont les déplacements de population et les événements concomitants, comme les guerres sont immobiles et durables, un déplacement géographique de la population non aussi important qu'une augmentation de la population globale. Sur diverses raisons il s'agit dans la construction ne commence pas à décliner immédiatement dès que commence à décroître la demande pour de l'espace supplémentaire. Elle se perpétue au-delà du moment où la croissance de la population cesse d'être de quelque importance.

Dans la deuxième phase l'excédent d'espaces reste suspendu au-dessus du marché décourageant même la construction de remplacement. La propriété ayant à envisager une taxation rigide et le paiement des intérêts, la diminution des recettes provenant des bâtiments déjà existants, soit parce qu'ils sont inoccupés ou que les loyers sont trop bas entraîne souvent des difficultés financières et des conclusions, et avec les propriétés disponibles à des prix de fluctuation, il y a peu d'encouragement à l'immeobilisation de capitaux dans de la nouvelle construction.

La facilité et la difficulté d'emprunter sur les marchés de l'argent à long terme sont des facteurs importants dans l'étude des cycles de construction de courte durée. Dans ce domaine les taux d'intérêt changent, mais rarement, et l'élément de réelle importance sur les marchés de l'argent à long terme se trouve dans la disponibilité de fonds à un taux standardisé.

Du point de vue du pouvoir d'achat et de l'emploiement, l'activité décline dans la construction contribue à affaiblir le relèvement des affaires, et tôt ou tard les conditions économiques générales empireront et deviennent un facteur du déclin du cycle de la construction.

Après 1931, l'inaktivité de la construction a été l'un des éléments de la dépression et un état relativement calme s'est continué jusqu'à la fin de la période sous étude. L'industrie a joui d'une ère de prospérité de 1926 à 1931, tandis que de 1919 à 1925, en faisant exception pour 1922, les opérations basées sur le volume ont été au-dessous de la normale. L'indice officiel, basé sur les contrats accordés, compte tenu des ajustements nécessités par les changements dans les coûts, indique un recul annuel de près d'un point pour la période de 18 ans sous étude. Bien que d'après une déviation standardisée de 35.2 les fluctuations aient été beaucoup prononcées, le coefficient de corrélation de .89 indique un rapport étroit avec les mouvements des affaires en général.

Productivité

La productivité par employé à gages dans les établissements manufacturiers canadiens a augmenté sensiblement en 1922 sur le bas niveau de l'année précédente et a continué son ascension par la suite à une allure plus modérée. Bien que le facteur de la meilleure organisation ne puisse se mesurer, le nombre de travailleurs salariés accuse une augmentation approximativement proportionnée à l'expansion du volume de la production. D'autre part la production a devancé l'augmentation du nombre d'employés à gages. L'indice du volume de la productivité par employé à gages accuse un gain de 3.06 points par année de 1919 à 1935. Une corrélation passablement significative s'est établie avec l'indice du volume physique des affaires au cours de la période.

L'expérience de la main-d'œuvre joue un rôle relativement de peu d'importance dans la production massive des articles standardisés. L'introduction du système convoyeur dans ces industries a amené un changement du tout au tout dans l'organisation interne des manufactures. L'accumulation continue et le transport des matériaux d'une partie de la manufacture à une autre en ont résulté, là où autrefois la production de chaque article était confinée à un endroit particulier de l'établissement. Grâce à la nouvelle méthode, hommes et machines ne sont plus groupés d'après l'espèce, mais placés plutôt dans l'ordre des fonctions qu'ils sont appelés à remplir dans la production de l'article ouvré. Par l'arrangement ordonné des fonctions et la distribution systématique du travail, des standards d'excellence mécanique et de production économique, insoupçonnés dans l'ancienne industrie, ont été obtenus dans la production de certains des articles standardisés les plus récents, spécialement les automobiles.

En général le facteur principal de l'expansion de la production, au cours de la période précédente, fut le grand nombre d'employés. Récemment cependant, un outillage technique plus perfectionné, une organisation améliorée et une plus grande habileté de la part des effectifs ouvriers semblent avoir supplanté définitivement les nombres comme instruments d'expansion de la production. Le nombre d'employés dans les établissements manufacturiers était de 468 000 en 1935 comparativement à 524 000 en 1919, et pourtant, dans l'intervalle la production des produits ouvres a augmenté de 39 p.c.

Chemins de fer

Le Canada dépendant beaucoup des transports pour son développement national, les chemins de fer y sont de la plus haute importance. Il était essentiel de maintenir un moyen de déplacement rapide entre des provinces si éloignées les unes des autres et même avec l'avènement d'autres formes de transport, ce facteur n'a pas encore perdu sa force. Les chemins de fer jouent en outre un rôle utile en ce qu'ils reculent jusqu'à la porte des Canadiens éloignés du littoral les bornes du marché mondial. Le transport sur grande échelle des marchandises était nécessaire pour partager dans les bénéfices de la spécialisation et la distribution mondiales du travail.

Les chemins de fer ont été plus défavorablement affectés que la majorité des autres industries canadiennes par la récente dépression. De 1921 à 1933 le déclin des recettes brutes d'exploitation a été de plus de 50 p.c. pour chacun des deux principaux réseaux. Le trafic-marchandises a tombé de 57 p.c. sur le Canadian National et de 53 p.c. sur le Pacifique Canadien, tandis que le nombre de voyageurs transportés, a diminué, sur les mêmes réseaux, de 54 p.c. et de 51 p.c. respectivement. Une tentative a été faite de réduire les dépenses d'exploitation, mais l'étendue de la réduction ou de l'aterrissage fut naturellement limité. Dans le même intervalle, tandis que les facteurs ferroviaires significatifs tombaient de plus de 50 p.c., l'indice du volume physique des affaires ne tombait pas d'un tiers. De plus, le relèvement des facteurs ferroviaires a été d'une nature plus modérée que dans les affaires en général. L'usage grandissant du camion, de l'autobus et de l'automobile de tourisme y a joué naturellement un rôle restrictif.

Dans le calcul de la tendance d'après-guerre des opérations et des recettes ferroviaires il ne faut pas oublier que les sept dernières années de la période de 18 ans sous étude furent des années de dépression. Par conséquent tout calcul de la tendance d'après guerre doit être affecté par les bas niveaux de ces sept dernières années. Si cette profonde et longue dépression s'était produite au commencement plutôt qu'à la fin de la période de 18 ans, les tendances qui en auraient résulté auraient été bien différentes.

Dans le dernier supplément le changement annuel de la moyenne de pourcentage était estimé pour 22 comptes d'exploitation des chemins de fer canadiens. Avec une seule exception chacun des 22 facteurs accusait un déclin, au cours des 16 années de 1919 à 1934, dans son pourcentage annuel moyen. Comme les dépenses ont diminué plus considérablement que les recettes brutes d'exploitation, celles-ci n'accusèrent que leur pourcentage moyen de gain annuel. Le niveau extrêmement bas des recettes nettes d'exploitation dans les premières années d'après-guerre a aussi exercé une influence sur la tendance de ce facteur. Le déclin dans la tendance de l'indice des recettes brutes d'exploitation de 1919 à 1936 a été de 2.12 points par année, tandis que les recettes nettes accusaient un léger gain de .004. Tel que l'indique une déviation standardisée de 28.55 à 13.84 la fluctuation dans les recettes nettes a été beaucoup plus prononcée que dans les recettes brutes.

Les tendances des opérations ferroviaires sont à la baisse contrairement à celles de l'indice des affaires en général qui est à la hausse. Le retour à la prospérité entraînera peut-être un relèvement correspondant dans les chemins de fer, renversant ainsi la tendance à long terme.

Emploiement

Le principal avantage des statistiques de l'emploiement en tant qu'indicateur de l'activité économique réside en ce qu'elles constituent une mesure commune pour toutes les affaires. En comptant le nombre d'employés on peut noter en même

temps les changements dans une filature et dans une manufacture d'automobiles, dans un magasin à rayons ou sur un chemin de fer.

Les données de la production, quand elles sont connues, exigent des unités de mesure très différentes et les données sur la valeur des produits sont dénaturées par les changements dans le pouvoir d'achat de l'argent. Le nombre d'employés inscrits sur une liste de paye est la mesure applicable à de longues périodes de temps et à une grande variété de branches des affaires.

Les statistiques de l'emploiement, servent de base, dans une certaine mesure, aux pronostics, et constituent pour ainsi dire la matière première de l'étude de tout le problème des fluctuations tant saisonniers que cycliques dans l'industrie et le commerce, bien qu'elles n'offrent pas à elles seules suffisamment de données pour en permettre une étude à fond. Evidemment elles servent d'abord et principalement à mesurer l'augmentation ou la diminution du nombre d'employés. Elles servent également à mesurer avec assez de précision l'expansion ou la contraction de la production et à cette fin elles établissent les comparaisons possibles entre les industries. Si, par exemple, elles révèlent que les matières premières sont produites en volume croissant sans qu'il y ait un accroissement dans la production des articles finis pour le consommateur, il y a danger de surabondance de matières premières dans les manufactures.

Au moyen des résultats du recensement et autres données qui s'y rattachent, il est possible d'estimer depuis 1921, le nombre d'employés à gages et celui d'employés au travail, la différence entre les deux étant le nombre de sans-travail. Ici, toute personne sans travail depuis au moins douze mois n'est pas considérée comme un employé à gages. Le nombre d'employés à gages a augmenté de 1,900,000 en 1921 à 2,800,000 en 1929, pour retomber ensuite à 2,500,000 en 1933. Le nombre d'employés à gages au travail a atteint un maximum de 2,500,000 en 1929 pour retomber à 1,800,000 en 1933. D'après cette estimation, 700,000 ou 29 p.c. ne travaillaient pas pendant la plus dure année de la dépression. Au cours des quatre dernières années les positions ont été renversées. Une augmentation prononcée s'est produite dans le nombre d'employés à gages au travail, tandis qu'une diminution relativement moins prononcée s'est produite dans le nombre de sans-travail. Les estimations annuelles d'employés à gages au travail révèlent une corrélation presque parfaite avec l'indice du volume physique des affaires. Au cours des seize années de 1921 à 1936, le coefficient fut de .975, apportant incidemment une preuve qui confirme l'exactitude approximative et l'utilité barométrique des deux facteurs. Dégagé de l'influence de la tendance à long terme, le calcul indique que les fluctuations dans la production et l'emploiement sont en relation étroite. Un si haut degré de corrélation se rencontre rarement dans le domaine des recherches économiques. Les fluctuations intermédiaires ne se sont pas rapprochées aussi étroitement de la norme conventionnelle, puisque la corrélation inverse entre l'indice des employés à gages sans travail et celui du volume des affaires a été d'environ .87.

L'accroissement annuel de l'indice du volume physique des affaires a été de 1.71 point comparativement à .78 pour l'indice du nombre d'employés à gages au travail. Cette disparité représente l'augmentation du rendement industriel au cours des dernières années.

L'épreuve ultime pour tout système industriel est la mesure dans laquelle il améliore les conditions de vie des personnes qui en tirent leur subsistance. Il n'y a pas, dans le domaine de l'histoire sociale, de question plus importante que celle de la situation du peuple, laquelle est encore le meilleur indice de la réussite ou de la faillite relatives de tout système économique ou industriel. Il est donc désirable d'enregistrer le progrès matériel du plus grand groupe économique du pays, à savoir, ceux qui travaillent pour des gages ou des salaires.

La plus sûre indication générale du taux des gages est donnée dans le supplément de janvier de la Gazette du Travail. Les renseignements y sont compilés après les rapports annuels des employeurs représentatifs, des unions ouvrières et aussi d'après les conventions de travail des syndicats de travailleurs. Aux fins de la présente étude la moyenne pondérée des taux de gages dans six branches principales de la production a été rapportée à l'année de base 1926. L'indice du coût de la vie établi par le Bureau Fédéral de la Statistique a été utilisé comme facteur de dégonflement. L'indice des gages réel qui ont résulté de l'opération a révélé un accroissement annuel de 2.04 points, à peu près sans corrélation avec le volume physique des affaires. L'indice du taux des gages a été relativement élevé de 1921 à 1924, bas de 1925 à 1930 et de nouveau élevé de 1931 à 1933. Les fluctuations cependant ont été relativement infimes, la déviation standardisée se limitant à 2.84 points.

Les gains réels dans les établissements manufacturiers accusent une tendance différente. La moyenne annuelle des gains a été calculée en divisant le nombre moyen d'employés à gages par la somme des gages payés. La moyenne annuelle des gains fut ensuite ajustée en fonction des fluctuations du coût de la vie. Un changement à la méthode de calculer le nombre d'employés à gages, au cours de la période de 1925 à 1930, a donné une tendance à la hausse au nombre d'employés à gages enregistrés et partant, une tendance contraire aux gains annuels moyens pour les six années. Malgré cette variation dans la mesure des gains réels ont été au-dessus de la normale de 1925 à 1929, et au-dessous de la normale dans toutes les autres années, à l'exception de deux cas de 1930 à 1935. Ainsi les gains réels tendent à la hausse dans les années prospères et à la baisse dans celles de dépression. Toutefois la relation avec le cycle conventionnel était loin d'être stricte. Les fluctuations des gains réels ne diffèrent pas beaucoup de celles des taux de gages réels, la déviation standardisée y ayant été de 2.26 points. Au cours de la période d'après guerre les gages et les gains réels chez les salariés voient une tendance à la hausse, les accroissements annuels y ayant été respectivement de 2.04 et 1.14 points.

Le commerce d'exportation

Il est reconnu depuis longtemps que le commerce extérieur est particulièrement essentiel à l'économie du Canada. L'abondance des ressources naturelles encourage la production d'un grand nombre de commodités en volume beaucoup plus considérable que les besoins normaux du marché domestique. Il y a par ailleurs plusieurs produits, notamment les matières premières industrielles, qui ne peuvent être fabriqués ici qu'à grand désavantage tandis qu'il y en a d'autres dont la production est à peu près impossible. L'accèsion récente du Canada à la quatrième place parmi les nations exportatrices n'était surpassé que par la Grande Bretagne, les Etats-Unis et l'Allemagne, indique jusqu'à quel point nous devons compter sur l'échange des produits sur les marchés internationaux.

Malheureusement le nationalisme économique a été un puissant facteur de ralentissement dans le commerce international au cours de la période d'après guerre. Une protection excessive sous forme de tarifs, de contingements, a déprécié l'argent et le contrôle du change étranger a eu une tendance à amoindrir la spécialisation internationale et à encourager la production dans des régions où elle coûte trop cher. Sous le couvert d'une grande variété de restrictions gouvernementales, l'agriculture a été stimulée artificiellement dans des pays industriels et l'industrie manufacturière encouragée dans des pays agricoles. Des deux côtés les avantages de la spécialisation ont été perdus, la production y est devenue coûteuse et la demande y a tombé à des niveaux abnormally bas. Au cours des deux ou trois dernières années les signes n'ont pas manqué du retour de plusieurs pays au système d'échange mondial. Les ajustements automatiques, particuliers à ce système ont de nouveau permis le relèvement des standards de vie.

De 1923 à 1929, portion centrale de la période d'après guerre, le volume des exportations canadiennes a été considérable. Le mouvement de sortie était légèrement au dessus de la normale en 1919; il passa ensuite par trois années de conditions défavorables. La récente dépression a été même plus intense et plus longue, ayant duré de 1930 à 1934. La fluctuation de l'indice du volume des exportations fut légèrement plus large que celle de l'indice du volume physique des affaires en général. Le coefficient de .50 indique une corrélation passable entre les deux.

Les conditions économiques dans les autres pays, et plus particulièrement en Grande Bretagne et aux Etats Unis, ont eu une influence marquée sur la situation domestique. La prospérité d'un pays quelconque tend à se propager aux autres au moyen du commerce, des relations bancaires et des placements. Il est donc naturel que la fluctuation du commerce d'exportation devance légèrement celle des affaires en général au Canada ou y coïncide.

Un indice annuel du commerce d'exportation visible et invisible du Canada sur une base dollar peut être établi pour les 18 dernières années au moyen des statistiques préparées par le professeur F. A. Knox et le Bureau. Les exportations de marchandises, même ajustées après déduction des effets de colons et autres exportations non commerciales, constituent plus de la moitié des crédits internationaux annuels du Canada. Les dépenses des touristes au pays ont une importance croissante, tandis que les exportations d'or ont augmenté rapidement en ces dernières années, formant une plus forte proportion des crédits établis à l'étranger par les Canadiens. La fluctuation de nos crédits internationaux a suivi la norme conventionnelle au cours de la période sous étude. Grâce en partie à l'inflation des prix le niveau ne s'est pas établi très loin de la ligne normale en 1919 et 1920. Il tomba cependant violemment l'année suivante. Un niveau relativement élevé fut maintenu de 1925 à 1930. Les crédits restèrent ensuite au dessous de la normale pendant cinq ans, pour se relever à un excellent niveau en 1936. Le coefficient avec le volume physique des affaires fut de .90, mais le revenu national accusa une corrélation plus étroite, les prix y jouant aussi un rôle de premier plan.

Prix

Le maintien d'une prospérité relativement ininterrompue dépend en bonne partie de la facilité avec laquelle on peut arriver à des relations convenables entre les prix des divers produits et services et à les maintenir. Si les prix divers ne sont pas tenus en relation convenable, ils entraînent la dislocation. Par exemple, des prix qui concordent mal peuvent causer une augmentation plus rapide du coût de la production que des prix de vente ou la déviation du cout et des recettes de la production des matières capital et des matières de consommation. Dans tous les cas, il est désirable que les prix des marchandises de la main d'œuvre et du capital soient suffisamment flexibles pour permettre un prompt ajustement de la production et de l'emploi aux changements de la demande et du coût. Autrement la production, l'emploi et l'organisme économique tout entier se désaxeraient et une dépression s'en suivrait.

Dans une ère d'entreprise privée vraiment compétitive, les prix flexibles et sans restrictions ont pour effet de porter à leur maximum la production et partant les moyens de satisfaire aux besoins de l'homme. La main d'œuvre et le capital producteurs de commodités ne rencontrant qu'une modique demande tendent à se tourner vers la production d'articles en meilleure demande. Ainsi faut-il qu'il y ait parité ou un rapport convenable entre les prix si les échanges doivent être continus, si la main-d'œuvre et le capital doivent rester actifs, si l'organisme économique moderne doit fonctionner sans heurt et produire un maximum de revenu social.

L'étendue de la baisse des prix au Canada au cours de la période d'après guerre est allée à non moins que 3.75 points par année dans l'indice général.

L'influence adverse de ces conditions a été aggravée par le fait que le déclin s'est limité aux deux périodes relativement courtes de 1920-1921 et 1929-1932. Dans l'intervalle le niveau général s'est passablement bien maintenu sans fluctuation importante dans une direction ou dans l'autre. Les prix se sont relevés en deux phases après le premier trimestre de 1933, s'acheminent vers la consolidation depuis le commencement de 1934 jusqu'à la mi-été de 1936. Bien que le cycle de prix, une fois ajusté à la tendance à long terme, ait quelque ressemblance infime avec le cycle de production, le coefficient à .29 n'indique aucune corrélation significative. Les résultats plutôt négatifs sont assez différents de ceux de la période d'avant guerre. Une analyse à fond de cette période conduit à la conclusion que les prix sont encore la meilleure série simple avec laquelle on puisse comparer tous les autres facteurs, et qu'ils sont, par ailleurs, le meilleur baromètre de l'état des affaires en général. Au début du siècle, alors que la plupart des pays avaient l'étalement, les mouvements des prix étaient la caractéristique première du cycle des affaires et il existait une corrélation marquée avec les baromètres principaux des fluctuations cycliques.

Normalement les prix des matières premières s'effondrent brutalement dès les débuts de la dépression, tandis que ceux des produits ouvrés demeurent relativement stables. En exprimant l'indice des prix des matières premières exprimé en pourcentage de l'indice général des prix, sur la base de 1913, il est évident que les producteurs primaires sont en posture franchement désavantageuse entre 1921 et 1924. Toutefois au cours des sept dernières années le pouvoir d'achat des producteurs primaires, calculé d'après cette norme, a tombé à un niveau beaucoup plus bas, sans précédent peut-être depuis la dépression de la dernière décennie du siècle dernier. En tenant pour normales les relations d'avant guerre, la seule période au cours des dix-huit dernières années où ce groupe a joui d'une parité avantageuse fut de 1926 à 1929. Dans un pays comme le Canada, où une si forte proportion de population active est engagée dans les industries primaires, le déséquilibre des prix révélé par ce calcul fut un facteur grave exerçant une influence adverse sur l'économie sociale toute entière pendant quatorze des dix-huit années.

Du point de vue de la disparité des prix seulement, les conditions pendant la majeure partie de la période d'après-guerre ont plutôt favorisé le groupe manufacturier que les producteurs primaires. Même de 1925 à 1929, alors que la proportion des prix des produits ouvrés par rapport à ceux des matières industrielles a montré beaucoup de stabilité, la relation fut moins propice qu'au cours de la période précédant immédiatement la guerre. Les années qui ont précédé la guerre ont été marquées par une baisse constante des prix des produits manufacturés. Le raffinement des méthodes techniques, le développement de la production massive et le perfectionnement de la gestion concouraient tous à abaisser les prix payés par les consommateurs pour les services des agencements de fabrication. Et ce n'est que depuis les 20 dernières années que la technique de production s'est améliorée sensiblement dans la culture et l'extraction des matières premières. Pendant la guerre de nouveaux et riches territoires furent exploités, et le niveau des prix s'élevant rapidement stimula l'expansion du rendement de certaines de ces matières. La déflation de 1920 surprit ce groupe dans une position vulnérable. Les producteurs manufacturiers purent liquider plus rapidement et adapter plus facilement les échelles de production aux possibilités du commerce.

De cet angle, les producteurs secondaires occupèrent une position plus favorable pendant la dépression que les années de prospérité. Par ailleurs, la dépression força le marché et partant le volume de rendement à se contracter fortement. Tout le poids du fardeau d'un outillage capital considérable, dont une bonne partie avait été édifiée à un coût exceptionnellement élevé, se fit sentir au cours de la dernière dépression particulièrement. L'expansion remarquable de la productivité industrielle, ajoutée aux prix sensiblement élevés dont jouirent les producteurs manufacturiers

après 1921, a donné une forte impulsion au pouvoir d'achat réuni des salariés industriels et d'autres groupes tirant leurs revenus des industries manufacturières. Pendant huit ans, au cours desquels le niveau général des prix ne subit que peu de changement, des engagements de longue durée furent pris qui devinrent une barrière à un mouvement de baisse. Le déclin prononcé des prix des matériaux au cours des premières années de la récente dépression fit contraste avec la stabilité relative des produits manufacturés et amena une augmentation de 104.1 p.c. en 1929 à 132.8 p.c. en 1932 dans la proportion de fabrication.

Il apparaît donc maintenant que la tendance à la baisse à long terme des prix, ayant exercé une pression adverse pendant treize ans, s'est terminée dans le premier trimestre de 1933. Avec de lourds placements dans l'entillage capital et en raison de la grande importance des frais généraux dans l'industrie typique moderne, le poids du rajustement nécessaire par une période prolongée de déclin dans les prix fut plus pénible et se fit sentir plus longtemps que dans toute période antérieure de baisse de prix. La proportion de produits manufacturés par rapport aux matériaux a baissé de 1932 à 1936, indiquant le retour à un meilleur équilibre.

Cours des actions

La contrevaluer du change indique le degré d'unanimité de l'opinion du public en général sur la valeur courante des titres. Les actions présentes sont toujours analysées aux fins de prévoir les tendances futures. Une amélioration des affaires signifie une amélioration correspondante dans les gains des compagnies industrielles et en outre un relèvement des prix des matières industrielles. Une dépression dans les affaires affecte défavorablement les gains industriels et force les actions industrielles à la baisse. Mais le fait que l'actualité du cours des actions précède d'habitude celle des affaires offre un intérêt barométrique spécial en raison de la tendance constante du marché à prédire les événements. Les hommes qui sont le plus au fait des conditions courantes pressentent les changements avant qu'ils ne se produisent réellement et le marché des titres valeurs reflète leur opinion.

La fonction primaire de la bourse des valeurs est de favoriser l'engagement le plus productif du capital dans les développements économiques. L'approvisionnement immédiat et direct de capital pour l'industrie se fait surtout par l'entremise des courtiers en placements. Cependant, les bourses sont un auxiliaire utile et nécessaire aux courtiers dans la distribution de nouvelles émissions et fournissent les débouchés par lesquels l'approvisionnement de capital peut passer des milliers de spéculateurs et portefeuillistes à travers le pays, pour y nourrir l'industrie et le commerce.

Une fonction subsidiaire consiste dans l'évaluation des valeurs. Cela veut dire que les bourses doivent, au moyen d'une évaluation continue, créer pour les valeurs des prix aussi rapprochés que possible des prix de placement basés sur les perspectives présentes et futures de rendement de revenu des diverses entreprises capitalisées au taux d'intérêt approprié. Pour en arriver à une évaluation juste, le commerce doit être limité à ceux qui fondent leurs décisions sur l'étude des mouvements à longue période des gains et de l'approvisionnement de nouvelles épargnes.

Une troisième fonction importante des bourses consiste à assurer un marché toujours prêt, avec une continuité raisonnable de prix. La négociabilité constante conférée aux titres par les bourses a le résultat pratique d'en rehausser considérablement la valeur sociale. Les bourses acquièrent de cette fonction en tenant les acheteurs en contact avec les vendeurs.

L'indice annuel du cours des actions ordinaires canadiennes accuse un accroissement annuel de 2.54 points de 1918 à 1936. Il fut au-dessus de la tendance à

long terme pendant ces années seulement de la période de dix huit ans, soit de 1926 à 1930, et de nouveau en 1936. Les fluctuations furent extrêmement violentes, la déviation standardisée de la ligne de la tendance à long terme ayant été de 34.75 points. La corrélation avec l'indice du volume physique des affaires a été remarquablement étroite, le coefficient s'établissant à .95.

Rendements des obligations

En ce qu'elles reflètent les changements dans le coût de l'argent, les fluctuations dans les rendements des obligations peuvent être regardées comme un baromètre significatif des affaires. Le loyer de l'argent intéresse également les emprunteurs commerciaux et les emprunteurs industriels. L'homme d'affaires mesure ordinairement en termes de coût seulement, la disponibilité du capital et du crédit. Un exemple peut illustrer l'importance d'une base à petit rendement comme encouragement à une entreprise dont les immobilisations sont considérables. Les dépenses pour l'établissement d'usines sidérurgiques sont placées par les promoteurs à \$100,000,000. Si l'argent prêté à long terme est à 5 p.c., les intérêts annuels que devra payer l'établissement seront de \$5,000,000. En supposant que le projet soit différé jusqu'à ce qu'on puisse obtenir de l'argent à un intérêt moins élevé, les frais annuels seront réduits considérablement. En supposant encore que le promoteur puisse obtenir les \$100,000,000 à 4 p.c., les frais d'intérêt annuels ne s'élèveraient qu'à \$4,000,000. Le million de dollars de différence serait affecté à des dépenses additionnelles, lesquelles grâce à la concurrence, feraient hausser les prix du minerai de fer, du charbon et autres matières. Il est donc de toute évidence que plus l'intérêt sera bas, plus on sera porté à engager des capitaux dans des entreprises à long terme. L'expansion du crédit à court ou à long termes peut découler du faible loyer de l'argent. L'augmentation du montant effectif d'argent ou de crédit peut être un indice d'une plus grande somme en cours ou d'une utilisation plus active de la même somme. A la faveur de conditions normales, l'augmentation du crédit se traduira par des prix plus élevés ou par un plus gros volume d'affaires ou par les deux. Ainsi, des taux anormalement bas ont un effet marqué comme stimulant des opérations productives, tandis que des taux élevés ont un effet contraire.

Les bas loyers de l'argent tels que reflétés par les rendements des obligations étant extraordinairement favorables à l'expansion des opérations commerciales, un indice des rendements capitalisés est un facteur approprié de comparaison avec les autres séries positives. L'indice du rendement capitalisé des obligations occupait une position assez favorable de 1921 à 1928, mais fut frappé ensuite de conditions adverses jusqu'en 1933. Ces dernières années la position a de nouveau été renversée. Il n'y eut probablement jamais auparavant dans ce pays pareil volume de fonds disponibles à un taux si bas et pour de si longues périodes. Le prix anormalement bas des obligations dans la période qui suivit immédiatement la guerre, ajouté aux prix élevés des trois dernières années, a donné à l'indice des rendements capitalisés un accroissement annuel de 2.75 points. La déviation standardisée de l'indice de la ligne de la tendance séculaire étant de 9.41, il est clair, que du point de vue de la théorie et de la pratique, le prix de l'argent joue un rôle très significatif dans les mouvements cycliques.

TABLES 1 - 19

Presenting on an annual basis from 1919 to 1936

310 of the statistical series

published in the

"MONTHLY REVIEW OF BUSINESS STATISTICS"

with secular trend, standard deviation and correlation

with the Physical Volume of Business

Indexes and Cycles of Economic Time Series showing (a) Trend Point of 1919, (b) The
 Volume of Business and (d) The Standard De-

Table 1.

No.	Classification	(a. c.)	b.) ¹ d.)	1919	1920	1921	1922	1923	1924
1	Physical Volume of Business .	a. 78.64	b. 1.66 Index	71.3	.75.0	66.5	79.1	85.5	84.6
		c. d.14.47	cycle - 0.51	- 0.37	- 1.07	- 0.31	+ 0.02	- 0.16	
2	INDUSTRIAL PRODUCTION	a. 75.75	b. 1.86	65.5	69.9	60.4	76.9	83.8	82.4
		c. .997	d.16.28	- 0.63	- 0.47	- 1.17	- 0.27	+ 0.04	- 0.16
3	Mineral Production	a. 59.60	b. 4.70	57.0	68.4	57.5	69.4	76.9	79.1
		c. .918	d. 9.15	- 0.28	+ 0.45	- 1.26	- 0.47	- 0.18	- 0.45
4	Copper exports	a. 25.66	b.14.75	70.3	76.8	41.1	45.8	66.8	86.9
		c. .072	d.27.08	+ 1.65	+ 1.34	- 0.52	- 0.89	- 0.66	- 0.46
5	Nickel exports	a. 65.53	b. 5.74	100.6	92.7	14.0	50.5	83.9	98.3
		c. .644	d.36.85	+ 0.95	+ 0.58	- 1.71	- 0.88	- 0.13	+ 0.11
6	Lead production	a. 23.72	b. 7.14	15.4	12.7	23.5	32.9	39.2	61.8
		c. .874	d.20.09	- 0.41	- 0.90	- 0.72	- 0.61	- 0.65	+ 0.12
7	Zinc exports	a. -0.22	b. 9.83	8.8	4.8	15.6	37.3	21.6	37.5
		c. .339	d.15.89	+ 0.57	- 0.30	- 0.24	+ 0.51	- 1.10	- 0.72
8	Gold shipments	a. 36.49	b. 9.00	34.7	44.6	58.6	74.3	70.2	85.6
		c. .723	d.10.41	- 0.17	- 0.09	+ 0.39	+ 1.04	- 0.22	+ 0.39
9	Silver shipments	a. 78.78	b. 0.68	73.6	56.0	62.0	85.1	80.2	86.9
		c. .744	d.15.91	- 0.33	- 1.47	- 1.14	+ 0.14	- 0.08	+ 0.30
10	Asbestos exports	a. 91.94	b.-1.98	84.2	105.0	46.0	73.3	90.9	76.6
		c. .755	d.19.58	- 0.40	+ 0.77	- 2.14	- 0.65	+ 0.35	- 0.28
11	Bauxite imports	a. 62.75	b. 5.54	40.4	80.2	29.1	29.2	90.3	89.3
		c. .888	d.47.78	- 0.47	+ 0.25	- 0.94	- 1.05	+ 0.11	- 0.02
12	Coal production	a. 97.91	b.-1.00	84.5	102.8	91.4	92.0	103.1	82.8
		c. .798	d.11.27	- 1.19	+ 0.52	- 0.40	- 0.26	+ 0.82	- 0.88
13	Manufacturing	a. 76.59	b. 1.47	71.0	70.7	60.1	75.4	86.2	84.7
		c. .968	d.13.78	- 0.41	- 0.53	- 1.41	- 0.41	+ 0.27	+ 0.06
14	Foodstuffs	a. 85.02	b.+0.46	84.4	68.0	71.6	88.8	91.5	97.3
		c. .529	d. 8.79	- 0.71	- 1.99	- 1.63	+ 0.27	+ 0.53	+ 1.14
15	Flour production ..	a. 82.66	b.+0.77	83.1	44.2	66.5	91.1	100.6	106.3
		c. .542	d.14.99	+ 0.03	- 2.62	- 1.18	+ 0.41	+ 0.99	+ 1.32
16	Sugar manufactured ²	a. 80.75	b. 0.13	-	67.7	66.5	99.5	71.6	73.7
		c. .265	d.10.75	-	- 1.21	- 1.34	+ 1.72	- 0.89	- 0.70
17	Inspected Slaughterings	a. 77.66	b. 2.25	89.6	73.9	66.8	77.4	84.9	101.7
		c. .082	d. 9.06	+ 1.32	- 0.66	- 1.70	- 0.77	- 0.20	+ 1.41
18	Cattle	a. 74.26	b. 2.10	86.2	75.8	65.2	75.8	74.0	82.0
		c. .468	d.10.05	+ 1.19	- 0.06	- 1.32	- 0.47	- 0.86	- 0.27
19	Sheep	a. 94.89	b. 3.57	111.8	121.5	118.6	109.3	91.6	93.5
		c. .448	d.14.86	+ 1.14	+ 1.55	+ 1.12	+ 0.25	- 1.18	- 1.29
20	Hogs	a. 81.74	b. 1.81	93.6	71.7	65.7	77.4	90.6	117.0
		c. .468	d.12.75	+ 0.93	- 0.93	- 1.54	- 0.77	+ 0.13	+ 2.06

1- / See heading for significance of a, b, c and d.

2- / 1920 - 1934.

Annual Increment, (c) The Coefficient of Correlation with the Index of the Physical
Variation from the Trend based on 1919 to 1934.

Business Indexes

1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	No.
90.9 + 0.16	100.0 + 0.67	106.1 + 0.93	117.3 + 1.64	125.5 + 2.09	109.5 + 0.87	93.5 - 0.35	78.7 - 1.49	79.7 - 1.53	94.2 - 0.65	102.4 - 0.19	112.2 + 0.48	1
89.7 + 0.17	100.0 + 0.69	105.6 + 0.92	117.8 + 1.55	127.4 + 2.02	108.0 + 0.72	90. - 0.47	74.0 - 1.60	76.8 - 1.54	93.6 - 0.62	103.6 - 0.12	114.4 + 0.44	2
86.5 - 0.15	100.0 + 0.81	106.9 + 1.05	117.1 + 1.65	123.2 + 1.80	116.4 + 0.55	107.8 - 0.91	108.2 - 1.38	110.5 - 1.65	134.1 + 0.42	149.4 + 1.57	162.8 + 2.52	3
96.6 - 0.65	100.0 - 1.07	114.2 - 1.09	162.1 + 0.14	211.9 + 1.43	209.2 + 0.79	166.7 - 1.33	236.7 + 0.71	214.5 - 0.65	281.6 + 1.28	347.4 + 3.17	369.9 + 3.45	4
110.1 + 0.28	100.0 - 0.16	110.0 - 0.01	154.4 + 1.01	179.2 + 1.53	153.0 + 0.66	111.2 - 0.63	55.2 - 2.31	130.3 - 0.42	193.0 + 1.12	233.6 + 2.07	272.2 + 2.96	5
89.3 + 1.13	100.0 + 1.31	109.7 + 1.44	119.1 + 1.55	115.1 + 0.99	117.3 + 0.75	94.2 - 0.76	90.2 - 1.31	93.9 - 1.48	122.0 - 0.44	119.5 - 0.92	135.1 - 0.50	6
43.1 - 0.99	100.0 + 1.98	89.0 + 0.66	88.0 - 0.02	96.7 - 0.89	113.6 + 0.36	139.4 + 1.36	107.2 - 1.29	108.6 - 1.82	165.3 + 1.13	176.7 + 1.23	183.3 + 1.03	7
95.4 + 0.47	100.0 + 0.05	105.5 - 0.29	105.4 - 1.16	109.7 - 1.62	112.2 - 2.24	149.8 - 0.51	176.0 + 2.16	165.9 + 0.32	176.3 + 0.46	188.2 + 0.73	216.8 + 2.62	8
93.8 + 0.69	100.0 + 1.04	101.7 + 1.10	101.1 + 1.02	96.6 + 0.69	111.7 + 1.60	85.7 - 0.08	81.2 - 0.40	69.2 - 1.20	59.2 - 1.87	88.2 - 0.09	78.1 - 0.77	9
97.5 + 0.89	100.0 + 1.12	94.0 + 0.91	89.9 + 0.81	100.9 + 1.47	73.8 + 0.19	49.9 - 0.94	30.1 - 1.85	63.5 - 0.04	58.0 - 0.22	69.1 + 0.44	95.1 + 1.88	10
88.9 - 0.15	100.0 - 0.03	176.1 + 1.44	228.2 + 2.42	173.7 + 1.16	149.4 + 0.54	154.0 + 0.10	72.5 - 1.30	73.0 - 1.41	114.5 - 0.66	177.2 + 0.54	235.2 + 1.64	11
79.7 - 1.07	100.0 + 0.79	105.8 + 1.39	106.6 + 1.54	106.2 + 1.60	90. + 0.30	74.3 - 1.01	71.2 - 1.20	72.2 - 1.02	83.7 + 0.07	84.2 + 0.20	91.7 + 0.96	12
92.5 + 0.51	100.0 + 0.95	100.8 + 0.90	113.0 + 1.68	117.7 + 1.92	98.0 + 0.38	84.6 - 0.70	74.0 - 1.58	79.9 - 1.26	93.4 - 0.38	100.5 + 0.02	113.7 + 0.88	13
100.1 + 1.40	100.0 + 1.34	94.9 + 0.71	98.2 + 1.03	93.8 + 0.48	83.1 - 0.79	84.1 - 0.73	84.3 - 0.76	87.4 - 0.46	87.6 - 0.48	87.2 - 0.58	103.9 + 1.26	14
97.5 + 0.68	100.0 + 0.80	93.9 + 0.34	105.0 + 1.03	101.3 + 0.73	89.0 - 0.14	91.8 - 0.01	83.2 - 0.63	82.5 - 0.73	78.3 - 1.06	75.1 - 1.33	79.2 - 1.10	15
101.8 + 1.90	100.0 + 1.72	83.7 + 0.19	80.2 - 0.15	80.9 - 0.09	81.3 - 0.07	84.5 + 0.22	82.3 - 0.001	75.9 - 0.61	75.3 - 0.68	84.4 + 0.16	88.8 + 0.56	16
98.2 + 0.78	100.0 + 0.73	103.1 + 0.82	101.8 + 0.43	98.8 - 0.15	85.4 - 1.88	94.1 - 1.17	104.0 - 0.32	111.5 + 0.25	121.6 + 1.12	121.9 + 0.91	141.6 + 2.83	17
88.9 + 0.20	100.0 + 1.10	104.6 + 1.35	101.6 + 0.84	101.8 + 0.65	89.1 - 0.82	87.8 - 1.16	85.3 - 1.62	99.5 - 0.41	122.6 + 1.68	125.4 + 1.75	138.8 + 2.87	18
89.9 - 1.78	100.0 + 1.34	113.3 + 0.68	117.1 - 0.67	132.8 + 0.15	136.5 + 0.16	150.4 + 0.85	144.4 + 0.21	159.2 + 0.96	156.8 + 0.29	157.8 + 0.39	152.3 - 0.22	19
106.0 + 1.05	100.0 + 0.44	102.0 + 0.45	102.2 + 0.33	94.5 - 0.42	77.3 - 1.91	90.0 - 1.06	109.3 + 0.32	112.5 + 0.43	115.3 + 0.50	112.6 + 0.15	143.0 + 2.39	20

Also explanation of table page

Indexes and Cycles of Economic Time Series showing (a) Trend Point of 1919, (b) The
Volume of Business and (d) The Standard Deviation

Table I. Business

No.	Classification	(a.)	b.) ¹	Index	1919	1920	1921	1922	1923	1924
		c.)	d.)		Cycle	- 0.48	+ 0.23	- 0.75	- 0.81	- 0.40
21	Crude Rubber Imports . . .	a. 45.96 c. .976	b. 6.95 d. 25.33	33.9 - 0.48	58.7 + 0.23	40.8 - 0.75	46.3 - 0.81	63.5 - 0.40	70.5 - 0.40	
22	Boots and Shoes Production	a. 88.08 c. .579	b. 0.67 d. 6.73	95.0 + 1.03	88.9 + 0.02	75.6 - 2.05	86.4 - 0.55	91.1 + 0.05	89.1 - 0.35	
23	Imports of Raw Textiles	a. 78.77 c. .405	b. 1.09 d. 12.67	66.3 - 0.98	89.9 + 0.79	67.4 - 1.07	88.9 + 0.54	90.7 + 0.60	73.0 - 0.89	
24	Raw cotton imports	a. 76.61 c. .481	b. 1.21 d. 12.54	67.0 - 0.77	90.0 + 0.97	67.6 - 0.91	84.3 + 0.32	81.3 - 0.01	66.7 - 1.27	
25	Cotton yarn imports	a. 100.96 c. .459	b. 0.02 d. 11.85	84.7 - 1.37	122.2 + 1.79	80.2 - 1.76	115.5 + 1.22	109.5 + 0.71	91.3 - 0.82	
26	Wool, raw and yarn, imports	a. 81.96 c. .324	b. 0.83 d. 22.39	55.3 - 1.19	77.1 - 0.25	61.7 - 0.98	103.2 + 0.84	133.8 + 2.17	99.7 + 0.61	
27	Forestry	a. 69.90 c. .911	b. 1.96 d. 15.26	59.5 - 0.68	67.9 - 0.26	46.5 - 1.79	73.4 - 0.16	86.8 + 0.59	82.5 + 0.18	
28	Newsprint	a. 45.10 c. .979	b. 6.40 d. 16.55	43.1 - 0.12	47.2 - 0.26	42.3 - 0.94	57.8 - 0.39	67.4 - 0.20	72.1 - 0.30	
29	Wood pulp exports	a. 83.03 c. .762	b. 0.99 d. 13.70	76.6 - 0.47	81.6 - 0.03	52.5 - 2.08	80.0 - 0.01	86.9 + 0.57	77.6 - 0.04	
30	Planks and boards exports	a. 95.60 c. .645	b. 2.57 d. 20.36	77.1 - 0.91	90.1 - 0.15	43.2 - 2.32	90.1 + 0.10	110.8 + 1.27	96.0 + 0.64	
31	Shingles exported	a. 103.01 c. .123	b. 3.14 d. 14.76	82.8 - 1.37	81.1 - 1.27	87.0 - 0.66	95.8 + 0.15	109.4 + 1.28	109.0 + 1.47	
32	Iron and steel	a. 79.02 c. .961	b. 0.43 d. 30.17	67.0 - 0.40	73.1 - 0.18	47.8 - 1.01	54.8 - 0.76	85.1 + 0.26	68.4 - 0.28	
33	Steel production	a. 114.51 c. .838	b. 1.37 d. 31.30	118.5 - 3.11	141.8 - 0.82	86.0 - 0.74	61.9 - 1.40	113.6 + 0.13	85.0 - 0.65	
34	Pig iron production	a. 113.54 c. .849	b. 3.39 d. 32.95	111.8 - 0.05	132.3 + 0.67	80.7 - 0.79	52.4 - 1.55	118.3 + 0.56	79.5 - 0.52	
35	Automobile production	a. 61.83 c. .900	b. 0.54 d. 29.54	142.9 - 0.64	46.0 - 0.55	32.4 - 1.03	49.3 - 0.48	71.9 + 0.26	64.8 + 0.01	
36	Coke production	a. 77.94 c. .889	b. 2.42 d. 14.93	87.7 + 0.65	89.0 + 0.58	74.6 - 0.55	64.2 - 1.41	87.4 - 0.01	75.2 - 0.99	
37	Crude petroleum imports	a. 42.51 c. .588	b. 9.83 d. 16.82	54.3 + 0.70	51.1 - 0.07	67.5 + 0.32	74.0 + 0.12	67.2 - 0.87	81.5 - 0.62	
38	Construction	a. 90.06 c. .939	b. 0.46 d. 35.82	56.2 - 0.95	75.2 - 0.40	70.0 - 0.53	92.4 + 0.10	85.0 - 0.09	79.6 - 0.23	
39	Contracts awarded	a. 85.55 c. .946	b. 0.51 d. 34.73	51.0 - 0.99	68.6 - 0.47	64.4 - 0.58	89.0 + 0.14	84.3 + 0.02	74.1 - 0.26	
40	Building permits	a. 92.14 c. .950	b. 1.43 d. 37.78	54.6 - 0.99	67.8 - 0.61	67.9 - 0.57	93.0 + 0.14	84.0 - 0.07	80.9 - 0.11	
41	Cost of construction	a. 117.12 c. .296	b. 1.99 d. 6.94	108.3 - 1.27	132.4 + 2.49	115.2 + 0.30	103.9 - 1.04	106.8 - 0.34	103.8 - 0.48	

1/ See heading for significance of a, b, c and d.

Annual Increment, (c) The Coefficient of Correlation with the index of the Physical
from the Trend based on 1919 to 1934.

Indexes - Continued.

1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	No.
97.4 + 0.39	100.0 + 0.21	128.3 + 1.06	153.5 + 1.78	171.3 + 2.21	139.4 + 0.67	123.3 0.24	103.4 - 1.30	98.3 - 1.77	140.2 - 0.39	131.8 + 1.00	135.8 - 1.11	21
87.0 - 0.76	100.0 + 1.07	103.4 + 1.48	104.5 + 1.54	102.8 + 1.19	88.7 - 1.00	91.7 - 0.66	92.4 - 0.65	100.1 + 0.39	92.9 - 0.78	109.1 + 1.53	110.0 + 1.56	22
87.0 + 0.13	100.0 + 1.07	100.9 + 1.06	100.7 + 0.96	97.8 + 0.64	74.1 - 1.32	72.4 - 1.54	73.4 - 1.54	97.7 + 0.25	111.6 + 1.30	96.6 + 0.02	120.2 + 1.80	23
87.3 + 0.27	100.0 + 1.19	101.9 + 1.24	99.7 + 0.97	100.6 + 0.95	75.0 1.19	71.1 - 1.60	73.7 - 1.49	92.8 - 0.06	111.9 + 1.37	91.5 - 0.37	112.2 + 1.20	24
90.1 - 0.93	100.0 - 0.09	111.5 + 0.87	114.1 + 1.09	113.8 + 1.06	98.2 0.25	91.2 0.85	93.7 0.64	101.8 + 0.04	100.3 - 0.08	108.2 + 0.59	97.5 + 0.32	25
84.0 - 0.13	100.0 + 0.55	91.5 + 0.13	101.3 + 0.53	77.1 + 0.59	60.5 - 1.37	67.6 1.09	64.2 - 1.28	120.0 + 1.18	114.2 + 0.88	119.6 + 1.08	162.4 + 3.27	26
90.9 + 0.61	100.0 + 1.07	101.2 + 1.02	104.0 + 1.08	112.7 + 1.52	100.9 + 0.62	81.6 0.77	68.1 - 1.79	77.8 - 1.28	99.6 + 0.02	105.1 - 0.15	124.0 + 1.76	27
80.9 - 0.16	100.0 + 0.61	110.8 + 0.88	126.9 + 1.47	145.1 + 2.18	122.9 + 1.05	116.0 - 0.75	101.5 - 1.62	106.8 - 1.68	138.2 - 0.17	146.5 0.05	169.2 + 0.97	28
94.7 + 1.29	100.0 + 1.75	84.6 + 0.69	86.4 + 0.90	83.7 + 0.77	75.4 + 0.31	62.5 0.62	45.2 - 1.82	60.1 - 0.66	60.8 - 0.54	65.9 - 0.09	76.8 + 0.48	29
102.0 + 1.06	100.0 + 1.09	95.6 + 0.99	81.3 + 0.42	82.3 + 0.59	71.2 + 0.17	44.4 1.04	32.2 - 1.50	45.5 - 0.72	64.0 + 0.31	62.0 + 0.34	91.6 + 1.42	30
103.5 + 1.31	100.0 + 1.29	79.0 + 0.08	84.7 + 0.65	11.3 0.02	53.0 1.05	41.8 - 1.59	50.1 0.78	65.6 + 0.43	56.8 + 0.06	109.2 + 3.85	120.0 + 1.41	31
82.2 + 0.19	100.0 + 0.80	96.2 + 0.68	132.4 1.20	139.8 + 2.16	97.3 + 0.50	60.3 0.79	51.3 - 1.39	35.3 - 1.25	19.1 0.43	61.3 - 0.10	94.2 + 0.82	32
96.9 - 0.27	100.0 - 0.14	117.0 + 0.38	159.1 + 1.63	177.5 + 2.20	130.0 + 0.87	88.5 + 0.82	47.1 + 1.52	52.8 - 1.22	97.8 + 0.11	120.5 - 0.80	143.6 + 1.50	33
77.3 - 0.48	100.0 + 0.31	95.8 + 0.28	141.3 + 1.77	148.7 + 2.09	101.2 + 0.76	57.0 0.30	19.9 1.50	32.2 - 1.03	55.6 2.16	82.2 + 0.69	97.0 + 1.12	34
79.1 + 0.48	100.0 + 1.17	87.5 + 0.72	118.2 + 1.75	128.3 + 2.07	74.9 + 0.24	40.7 0.35	29.6 1.22	32.2 - 1.24	57.1 0.17	84.5 + 0.48	79.3 + 0.79	35
76.7 - 1.06	100.0 + 0.34	104.4 + 0.48	120.9 + 1.42	140.0 + 2.54	123.6 + 1.28	97.9 0.474	82.1 1.67	94.0 - 1.19	118.8 + 0.31	119.4 + 0.18	126.3 + 0.42	36
75.7 - 1.53	100.0 - 0.67	116.4 - 0.28	144.0 + 0.77	180.3 + 2.28	175.9 + 1.50	78.0 + 0.32	152.4 - 1.07	158.7 - 1.27	181.4 0.27	193.3 0.39	209.4 0.01	37
82.6 - 0.13	100.0 + 0.37	118.6 + 0.90	127.8 + 1.31	164.1 + 2.19	129.7 + 1.25	91.2 + 0.19	111.8 1.13	125.4 1.13	125.3 1.32	146.7 0.26	155.6 1.02	38
79.9 - 0.07	100.0 + 0.54	112.4 + 0.89	126.6 + 1.31	154.7 + 2.14	122.6 + 1.23	84.6 + 0.15	75.6 1.25	26.1 1.53	57.7 1.27	62.0 0.99	43.6 + 0.96	39
81.3 - 0.06	100.0 + 0.47	120.6 + 1.11	143.8 + 1.71	153.1 + 1.99	111.4 + 0.93	76.9 + 0.05	20.2 - 1.15	17.2 - 1.46	20.4 - 1.33	34.8 0.91	28.8 1.03	40
101.5 - 0.53	100.0 - 0.46	99.2 - 0.29	101.3 + 0.30	105.4 + 1.18	102.6 + 1.07	96.1 + 0.42	88.9 0.33	82.9 0.77	85.5 0.25	85.9 + 0.11	88.4 + 0.76	41

Indexes and Cycles of Economic Time Series showing (a) Trend Point of 1919, (b) The
Volume of Business and (d) The Standard Deviation

Table 1. Business

No.	Classification	(a.)		Index Cycle	1919	1920	1921	1922	1923	1924
		c.	d.							
42	Electric Power Production	a. 38.35 c. .863	b. 8.75 d. 12.05	45.5 + 0.59	48.7 + 0.13	46.4 - 0.78	55.7 - 0.74	67.0 - 0.53	77.0 - 0.42	
43	DISTRIBUTION	a. 88.84 c. .952	b. 1.11 d. 10.16	87.2 - 0.16	89.2 - 0.07	83.5 - 0.74	85.0 - 0.70	89.9 - 0.33	90.7 - 0.36	
44	Trade employment	a. 91.31 c. .453	b. 2.12 d. 8.04	101.6 + 1.28	102.0 + 1.07	92.8 - 0.34	90.8 - 0.85	92.1 - 0.96	92.6 - 1.16	
45	Carloadings	a. 91.33 c. .976	b. 0.55 d. 14.30	83.9 - 0.52	86.5 - 0.30	70.2 - 1.40	83.5 - 0.45	87.5 - 0.11	89.3 + 0.05	
46	Imports	a. 89.32 c. .985	b. 0.29 d. 21.28	71.9 - 0.82	86.9 - 0.13	74.4 - 0.73	79.1 - 0.52	92.4 + 0.09	89.7 - 0.05	
47	Exports	a. 78.21 c. .852	b. 0.55 d. 14.61	77.8 - 0.02	65.9 - 0.88	59.2 - 1.38	69.9 - 0.68	80.5 + 0.01	83.9 + 0.20	
48	Creamery Butter Production	a. 66.82 c. .322	b. 4.14 d. 7.45	58.6 - 1.10	63.0 - 1.07	72.7 - 0.32	86.1 + 0.92	91.9 + 1.14	101.0 + 1.81	
49	Factory Cheese Production	a. 98.43 c. .176	b. 2.32 d. 8.19	96.9 - 0.19	86.9 - 1.12	94.4 + 0.07	79.1 - 1.51	88.3 - 0.10	87.2 + 0.05	
50	Cheese exports	a. 114.63 c. .119	b. 5.05 d. 22.07	62.7 - 2.35	157.6 + 2.18	109.6 + 0.23	99.7 + 0.10	70.0 - 1.11	71.9 - 0.79	
51	Salmon exports	a. 107.32 c. .194	b. 0.98 d. 24.58	158.3 + 2.07	75.3 - 1.26	87.5 - 0.73	54.4 - 2.03	83.1 - 0.83	130.5 + 1.14	
52	Tobacco Releases	a. 85.02 c. .695	b. 3.09 d. 15.40	70.5 - 0.96	100.1 + 0.77	93.2 + 0.13	77.9 - 1.13	82.5 - 0.97	85.9 - 0.95	
53	Cigars	a. 133.21 c. .401	b. 4.23 d. 12.68	125.7 - 0.59	157.9 + 2.28	131.9 + 0.56	99.6 - 1.65	108.0 - 0.65	97.7 - 1.13	
54	Cigarettes	a. 57.94 c. .771	b. 7.06 d. 16.50	49.0 - 0.54	78.3 + 0.81	78.5 + 0.39	67.1 - 0.73	73.5 - 0.77	81.2 - 0.73	

Table 2. Agricultural

1	Grain and Live Stock									
	Marketings	a. 69.51 c. .532	b. 3.24 d. 17.54	48.1 - 1.22	52.6 - 1.15	65.2 - 0.62	82.6 + 0.19	91.4 + 0.51	102.5 + 0.96	
2	Grain marketings	a. 65.52 c. .590	b. 4.01 d. 20.55	38.0 - 1.34	47.9 - 1.05	63.9 - 0.47	83.0 + 0.27	92.7 + 0.54	104.2 + 0.91	
3	Wheat	a. 62.74 c. .500	b. 4.64 d. 21.11	34.9 1.32	46.3 1.00	55.6 0.78	82.2 + 0.26	93.5 + 0.58	101.4 + 0.73	
4	Oats	a. 156.66 c. .231	b. 6.25 d. 41.25	96.1 - 1.52	96.2 - 1.31	234.6 + 2.19	138.4 + 0.01	133.1 + 0.04	199.2 + 1.55	
5	Barley	a. 58.93 c. .810	b. 0.71 d. 20.56	50.3 - 0.42	29.4 - 1.49	56.2 - 0.20	48.7 - 0.60	49.0 - 0.62	67.3 + 0.23	
6	Flax	a. 104.11 c. .367	b. 4.28 d. 33.71	46.1 - 1.72	75.5 - 0.72	114.3 + 0.56	60.2 - 0.92	74.5 - 0.37	123.3 + 1.20	
7	Rye	a. 94.49 c. .548	b. 0.38 d. 48.08	25.5 - 1.43	32.8 - 1.29	50.6 - 0.93	167.0 + 1.48	150.3 + 1.13	129.1 + 0.68	

1/ See Heading above for definition of a, b, c and d.

A. Val Increment. (c) The Coefficient of Correlation with the Index of the Physical
from the Trend based on 1919 to 1934.

Indexes .. Continued.

1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	No.
83.6	100.0	120.3	135.1	128.5	149.6	135.0	132.7	143.4	175.0	192.5	210.8	42
0.60	+ 0.03	+ 0.99	+ 1.49	- 0.82	+ 1.24	- 0.44	- 1.61	- 1.45	+ 0.45	+ 1.17	+ 1.97	
93.9	100.0	107.4	116.2	120.5	111.7	102.3	91.9	84.1	96.0	99.4	106.0	43
0.16	+ 0.33	+ 0.95	+ 1.71	+ 2.03	- 0.24	+ 0.02	- 1.12	- 1.64	- 0.93	- 0.71	- 0.17	
95.1	99.2	107.4	116.1	121.7	111.7	123.6	116.4	112.3	119.1	122.1	127.5	44
2.11	- 0.76	- 0.01	+ 0.71	- 0.11	- 0.82	+ 0.86	- 0.30	- 1.08	- 0.49	- 0.38	+ 0.02	
93.9	100.0	104.0	113.4	108.1	113.7	78.9	66.7	62.2	71.2	72.2	75.1	45
0.41	+ 0.88	+ 1.34	+ 1.89	+ 1.76	+ 0.78	- 0.41	- 1.22	- 1.50	- 0.83	- 0.72	- 0.48	
88.0	100.0	112.3	128.0	137.6	116.1	87.0	67.8	60.1	72.4	77.1	86.1	46
0.14	+ 0.41	+ 0.97	+ 1.69	+ 2.17	- 0.14	- 0.27	- 1.19	- 1.56	- 1.00	- 0.79	- 0.39	
95.9	100.0	99.5	110.9	100.6	98.4	68.8	65.7	70.9	84.4	91.5	104.8	47
+ 0.96	+ 1.23	+ 1.16	+ 1.90	+ 1.18	- 0.66	- 1.10	- 1.35	- 1.03	- 0.14	+ 0.31	+ 1.18	
95.6	100.0	99.9	94.8	90.3	90.6	127.5	120.8	121.8	130.8	139.9	140.4	48
+ 0.53	+ 0.57	- 0.004	- 1.24	- 1.58	- 1.12	+ 1.48	+ 0.03	- 0.40	+ 0.26	+ 0.92	+ 0.43	
103.1	100.0	80.4	84.2	69.1	69.4	66.4	70.2	64.7	56.3	58.4	68.0	49
+ 2.27	+ 2.17	+ 0.06	+ 0.81	0.55	0.53	- 0.51	+ 0.23	- 0.15	- 0.90	- 0.40	+ 1.10	
111.2	100.0	93.2	76.7	79.2	71.1	46.4	47.1	41.4	33.6	29.3	59.3	50
- 1.22	+ 0.94	+ 0.86	+ 0.54	0.73	0.56	- 0.35	+ 0.02	- 0.12	- 0.24	- 0.20	+ 1.38	
134.6	100.0	106.7	112.0	113.1	95.0	92.5	91.8	99.6	76.5	90.8	87.4	51
+ 1.35	0.02	- 0.29	+ 0.55	0.44	0.0	- 0.12	- 0.11	+ 0.24	- 0.66	- 0.11	- 0.25	
94.1	100.0	115.5	132.2	109.7	101.1	130.5	108.8	118.0	129.1	141.2	146.2	52
- 0.62	- 0.43	+ 0.37	+ 1.26	+ 2.18	- 1.70	+ 0.54	- 1.07	- 0.67	- 0.15	+ 0.43	+ 0.56	
101.0	100.0	98.3	103.0	116.6	101.1	85.0	79.1	62.0	65.3	70.7	68.6	53
- 0.54	- 0.28	- 0.08	- 0.10	1.56	- 1.1	0.21	- 0.2	- 0.94	- 0.34	+ 0.41	+ 0.58	
91.2	100.0	121.4	116.1	101.1	101.5	147.5	124.1	139.7	155.5	171.9	180.7	54
0.55	- 0.45	+ 0.43	- 0.58	- 1.11	- 0.79	- 0.71	- 1.04	- 0.51	+ 0.06	+ 0.16		

Markings

91.2	100.0	103.6	146.7	101.1	103.0	99.0	114.3	105.1	88.5	87.4	82.7	1
- 0.41	+ 0.45	+ 0.47	+ 2.74	- 0.05	0.1	- 0.54	+ 0.15	- 0.56	- 1.69	- 1.94	- 2.38	
96.9	100.0	105.4	159.0	111.1	108.0	102.9	121.7	111.7	90.2	88.0	80.3	2
- 0.36	+ 0.31	+ 0.38	+ 2.79	- 0.07	- 0.08	- 0.52	+ 0.20	- 0.48	- 1.73	- 2.03	- 2.60	
93.0	100.0	109.7	164.2	108.9	114.3	104.0	133.2	120.8	98.1	97.4	76.8	3
+ 0.12	+ 0.23	+ 0.47	+ 2.83	- 0.01	+ 0.03	- 0.68	+ 0.48	- 0.32	- 1.62	- 1.87	- 2.63	
82.4	100.0	43.5	114.0	83.1	49.5	70.8	77.5	63.2	57.9	60.5		4
- 1.05	- 0.31	- 1.53	+ 0.33	- 0.27	- 0.93	+ 0.36	- 0.11	0.0	+ 0.01	+ 0.03	+ 0.25	
85.2	100.0	83.6	95.2	92.0	74.2	40.0	49.3	52.2	23.1	81.9		5
- 1.07	+ 1.16	+ 0.92	+ 1.45	+ 1.26	+ 0.36	- 0.59	- 1.37	- 0.95	- 0.85	- 2.30	+ 0.53	
40.1	100.0	76.2	154.5	25.5	52.3	28.0	30.5	3.4	6.7	12.8		6
- 1.83	+ 0.77	+ 0.19	+ 2.64	- 1.06	- 0.14	- 0.12	- 0.61	- 0.41	- 1.09	- 0.86	- 0.55	
69.8	100.0	101.9	173.6	107.9	125.0	100.3	79.9	68.9	24.5	19.7	39.5	7
0.56	+ 0.06	+ 1.13	+ 1.57	+ 0.20	+ 0.55	+ 0.07	0.41	- 0.64	- 1.57	- 1.68	- 1.28	

Indexes and Cycles of Economic Time Series showing (a) Trend Point of 1912, (b) The Volume of Business and (d) The Standard Deviation

Table 2. Agricultural

No.	Classification	(a) S.	(b, 1 d)						
				1919	1920	1921	1922	1923	1924
8	Live Stock Marketing	a. 87.63 c. .493	b. .030 d. 8.77	Index 93.3 Cycle + 0.65	73.4 - 1.59	70.9 - 1.84	80.9 + 0.66	85.3 + 0.13	95.1 + 0.09
9	Cattle	a. 93.00 c. .536	b. 1.68 d. 10.55	100.4 + 0.70	79.2 - 1.15	73.0 - 1.58	82.0 - 0.56	82.8 - 0.35	87.8 + 0.30
10	Calves	a. 67.98 c. .764	b. 2.63 d. 9.75	68.3 + 0.03	64.3 - 0.65	60.1 - 1.35	73.7 - 0.22	71.8 - 0.69	81.3 + 0.02
11	Hogs	a. 77.53 c. .264	b. 1.45 d. 14.26	79.5 + 0.12	58.0 - 1.47	59.2 - 1.49	71.6 - 0.72	86.7 + 0.24	108.7 + 1.68
12	Sheep	a. 122.19 c. .644	b. 0.29 d. 17.40	134.2 + 0.69	122.7 + 1.20	143.7 + 1.20	152.4 + 1.74	125.1 + 0.10	107.7 - 0.92

Table 3. Cold

1	Cold Storage Holdings	a. 91.11 c. .159	b. 2.15 d. 8.86	104.6 + 1.52	94.2 + 0.11	86.4 - 1.02	82.8 - 1.66	87.6 - 1.36	114.9 + 1.48
2	Eggs	a. 66.09 c. .242	b. 6.35 d. 25.81	80.2 + 0.55	75.5 + 0.12	83.4 + 0.18	91.6 + 0.25	81.9 - 0.37	85.7 - 0.47
3	Butter	a. 75.71 c. .393	b. 6.58 d. 23.30	80.0 + 0.18	94.3 + 0.52	85.5 - 0.14	83.5 - 0.51	105.1 + 0.13	131.1 + 0.97
4	Cheese	a. 51.91 c. .563	b. 2.21 d. 16.28	42.2 - 0.60	64.6 + 0.64	36.2 - 1.24	45.0 - 0.83	36.5 - 1.49	77.5 + 0.89
5	Beef	a. 192.64 c. .020	b. 8.62 d. 31.95	287.5 + 2.97	197.1 + 0.41	143.6 - 1.00	142.9 - 0.75	124.7 - 1.05	122.1 - 0.86
6	Pork	a. 119.87 c. .274	b. 1.33 d. 19.79	131.4 + 0.58	103.8 - 0.74	96.8 - 1.03	87.9 - 1.41	105.1 - 0.48	151.6 + 1.94
7	Mutton	a. 148.58 c. .292	b. 0.59 d. 28.69	182.2 + 1.17	136.8 - 0.39	208.9 + 2.14	122.9 - 0.83	136.9 - 0.32	118.6 - 0.94
8	Poultry	a. 63.85 c. .161	b. 7.94 d. 25.63	82.0 + 0.71	62.8 - 0.35	63.2 - 0.64	77.7 - 0.39	95.0 - 0.02	101.4 - 0.08
9	Lard	a. 74.08 c. .569	b. 0.90 d. 16.37	67.1 - 0.43	69.7 - 0.32	57.9 - 1.10	57.7 - 1.17	67.7 - 0.61	107.0 + 1.74
10	Veal	a. 15.11 c. .264	b. 2.09 d. 26.97	190.9 + 2.03	135.2 - 0.04	104.0 - 1.04	121.8 - 0.30	119.6 - 0.30	117.7 - 0.30

1/ See Heading above for definition of a, b, c and d.

Annual Increment, (c) The Coeff. of Correlation with the Index of the Physical
from the Trend based on 1919 to 1934.

Marketings - Concluded.

1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	No.
101.1	100.0	95.4	91.5	87.9	72.5	81.5	81.3	75.4	80.5	84.9	93.1	8
+ 1.06	+ 1.78	+ 1.16	+ 0.75	+ 0.37	- 1.35	- 0.29	- 0.28	- 0.92	- 0.30	+ 0.24	+ 1.21	
96.6	100.0	92.6	87.5	81.1	62.4	67.2	60.2	61.8	71.5	84.1	90.4	9
+ 1.30	+ 1.78	+ 1.24	+ 0.91	+ 0.47	- 1.15	- 0.53	- 1.04	- 0.72	+ 0.35	+ 1.71	+ 2.47	
92.0	100.0	106.6	105.4	104.4	90.8	90.5	91.8	91.8	110.8	122.9	128.5	10
+ 0.84	+ 1.39	+ 1.80	+ 1.41	+ 1.03	- 0.63	- 0.93	- 1.07	- 1.34	+ 0.34	+ 1.31	+ 1.61	
111.6	100.0	97.6	95.4	94.3	79.8	97.0	109.8	80.9	84.1	72.9	91.7	11
+ 1.78	+ 0.87	+ 0.60	+ 0.34	+ 0.16	- 0.96	- 0.55	+ 0.24	- 1.18	- 1.06	- 1.95	- 0.73	
95.9	100.0	105.0	103.0	121.0	118.0	141.2	138.6	138.9	141.5	146.2	100.2	12
+ 1.61	- 1.29	- 1.12	- 1.25	- 0.24	- 0.42	+ 0.89	+ 0.73	+ 0.72	- 0.86	+ 1.11	- 1.55	

Storage Holdings.

108.5	100.0	110.0	112.8	109.6	128.4	125.7	120.1	115.4	114.2	128.4	141.3	1
+ 0.51	- 0.69	+ 0.20	+ 0.27	- 0.33	+ 1.54	+ 1.00	+ 0.12	- 0.65	- 1.03	+ 0.77	+ 1.55	
89.1	100.0	96.9	102.7	129.5	146.0	215.2	2176.2	156.6	108.3	115.9	92.5	2
- 0.58	- 0.41	- 0.77	- 0.79	- 0.002	+ 0.39	+ 2.83	+ 1.07	+ 0.07	- 2.05	- 2.00	- 3.16	
113.0	100.0	106.0	128.6	181.5	207.5	189.0	146.7	150.5	178.7	210.3	231.6	3
- 0.09	- 0.93	- 0.96	- 0.27	- 1.72	+ 2.55	+ 1.47	- 0.62	- 0.74	+ 0.18	+ 1.26	+ 1.89	
76.0	100.0	92.3	84.8	84.6	64.2	76.6	59.6	74.2	81.5	91.1	107.5	4
+ 0.67	+ 2.00	+ 1.39	+ 0.80	+ 0.65	- 0.74	- 0.11	- 1.29	- 0.53	- 0.22	+ 0.24	+ 1.07	
127.4	100.0	136.5	117.8	112.6	109.1	71.2	70.3	81.2	103.8	125.7	141.1	5
- 0.42	- 1.01	+ 0.40	+ 0.09	+ 0.19	+ 0.35	- 0.56	- 0.32	+ 0.29	+ 1.27	+ 2.22	+ 2.97	
140.2	100.0	123.7	133.8	114.9	93.8	74.4	111.7	103.4	85.8	95.9	115.0	6
+ 1.43	- 0.53	+ 0.73	+ 1.31	+ 0.42	- 0.58	- 1.49	+ 0.47	+ 0.13	- 0.71	0.13	+ 0.90	
125.9	100.0	129.0	125.2	138.7	192.9	150.3	171.2	124.5	142.6	144.8	127.7	7
- 0.67	- 1.55	- 0.52	- 0.63	- 0.14	+ 1.77	+ 0.31	+ 1.06	- 0.55	+ 0.10	+ 0.20	- 0.38	
133.7	100.0	145.1	128.3	145.3	193.7	113.4	214.2	127.1	191.4	170.5	239.0	8
+ 0.87	- 0.76	+ 0.69	- 0.27	+ 0.07	+ 1.66	- 1.78	+ 1.84	- 1.87	+ 0.33	0.80	+ 1.57	
89.6	100.0	104.7	90.6	108.6	65.4	78.3	71.6	86.4	71.1	81.9	76.9	9
+ 0.62	+ 1.20	+ 1.43	+ 0.51	+ 1.56	- 1.14	- 0.40	- 0.87	- 0.02	- 1.01	- 0.40	- 0.86	
102.7	100.0	113.0	94.0	144.4	175.8	114.1	84.7	85.6	123.5	179.5	236.7	10
- 0.78	- 0.80	- 0.24	- 0.86	+ 1.08	+ 2.32	+ 0.11	- 0.90	- 0.79	+ 0.69	+ 2.11	+ 5.05	

Indexes and Cycles of Economic Time Series showing (a) Trend Point of 1919, (b) The
Volume of Business and (d) The Standard Deviation

Table 4. General

No.	Classification	(a.)		Index	1919	1920	1921	1922	1923	1924
		c.	d.							
Mineral Production										
1.	Gold	a. 37.91	b. 8.91	Index	43.7	43.6	52.8	72.0	70.3	86.9
		c. .746	d. 9.24	Cycle	+ 0.63	- 0.35	- 0.31	+ 0.80	- 0.35	+ 0.48
2.	Silver	a. 77.06	b. 1.17		71.6	59.6	60.5	83.3	83.1	88.2
		c. .811	d. 14.98		- 0.36	- 1.24	- 1.26	+ 0.18	+ 0.91	+ 0.35
3.	Nickel	a. 59.93	b. 5.96		67.8	93.3	29.4	26.8	95.1	105.8
		c. 616	d. 37.24		- 0.21	+ 0.74	- 1.14	- 1.37	+ 0.30	+ 0.43
4.	Copper	a. 13.43	b. 15.63		56.4	61.3	35.8	32.2	65.3	78.5
		c. .900	d. 25.40		+ 1.69	+ 1.27	- 0.35	- 1.11	- 0.42	- 0.51
5.	Zinc	a. 14.53	b. 10.97		21.5	26.6	35.4	37.5	40.3	66.0
		c. .515	d. 19.82		+ 0.35	+ 0.06	- 0.05	- 0.50	- 0.91	- 0.17
6.	Petroleum	a. 18.71	b. 27.01		66.0	53.9	51.5	49.1	46.7	44.1
		c. .69	d. 67.15		+ 1.26	+ 0.68	+ 0.24	- 0.20	- 0.63	- 1.08
7.	Asbestos	a. 75.23	b. 0.12		57.0	71.4	33.2	58.6	82.8	80.8
		c. .381	d. 22.24		- 0.82	- 0.17	- 1.88	- 0.73	+ 0.36	+ 0.28
8.	Gypsum	a. 63.43	b. 2.16		33.8	48.6	43.7	63.3	65.4	73.1
		c. .950	d. 33.01		- 0.90	- 0.51	- 0.73	- 0.20	- 0.20	- 0.03
9.	Salt (Commercial)	a. 65.23	b. 3.70		56.5	79.9	62.7	69.2	77.1	79.2
		c. .822	d. 10.34		- 0.84	+ 1.06	- 0.96	- 0.69	- 0.28	- 0.44
10.	Cement	a. 86.57	b. 0.14		57.4	76.4	66.1	79.7	86.6	86.1
		c. .914	d. 30.35		- 0.96	- 0.34	- 0.68	- 0.24	- 0.02	- 0.04
11.	Clay Products	a. 112.23	b. 3.47		16.3	103.0	85.5	110.4	101.2	89.0
		c. .925	d. 27.42		- 1.31	- 0.21	- 0.72	+ 0.31	+ 0.10	- 0.21
12.	Lime	a. 75.22	b. 2.16		60.4	79.7	58.2	75.9	84.9	77.3
		c. .906	d. 23.38		+ 0.63	+ 0.10	- 0.91	- 0.25	+ 0.04	- 0.37
13.	Ferro-alloys Production ..	a. 61.84	b. 1.34		76.0	48.7	39.6	37.9	73.4	61.4
		c. .825	d. 31.59		+ 0.45	- 0.46	- 0.79	- 0.89	+ 0.20	- 0.25
14.	Timber Scaled in B.C. ...	a. 77.23	b. 0.51		60.3	70.1	61.3	65.1	86.4	87.4
		c. .938	d. 17.86		- 0.95	- 0.43	- 0.95	- 0.76	+ 0.40	+ 0.43
15.	Truck Production	a. 38.25	b. 2.95		20.9	26.9	13.6	21.6	50.8	47.7
		c. .962	d. 36.44		- 0.48	- 0.39	- 0.84	- 0.70	+ 0.02	- 0.15
Industrial Production										
16.	United States	a. 86.64	b. 0.25		77.1	81.6	62.2	78.7	94.1	88.0
		c. .926	d. 14.35		+ 0.63	- 0.33	- 1.67	- 0.50	+ 0.59	+ 0.18
17.	France	a. 57.46	b. 3.09		45.2	49.2	43.6	61.9	69.9	86.5
		c. .844	d. 15.63		- 0.78	- 0.73	- 1.28	- 0.31	+ 0.01	+ 0.87
18.	United Kingdom	a. 94.0	b. 1.68		-	104.3	79.5	93.1	99.7	105.7
		c. .674	d. 7.84		-	+ 1.31	- 0.35	- 0.54	+ 0.08	+ 0.64

1/ See Heading above for definition of a, b, c and d.

Table 5. Building

No.	Building Permits	(a.)								
		c.	d.							
1.	Nova Scotia	a. 284.79	b. 5.86							
		c. .538	d. 162.44		-	479.3	308.9	265.8	81.4	99.2
2.	New Brunswick	a. 231.39	b. 5.67		-	328.7	195.6	262.9	136.1	193.5
		c. .375	d. 86.01		-	+ 1.13	- 0.35	+ 0.50	- 0.91	- 0.18

Annual Increment, (c) The Coefficient of Correlation with the index of the Physical
from the Trend based on 1919 to 1934.

Product

1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	NP
98.9	100.0	105.6	107.8	109.9	119.8	153.6	173.5	168.1	169.3	187.0	212.6	1
+ 0.81	- 0.03	- 0.39	- 1.11	- 1.85	- 1.74	+ 0.95	+ 2.14	+ 0.59	- 0.24	+ 0.71	+ 2.51	
90.4	100.0	101.6	98.1	103.5	118.2	91.9	82.0	67.9	73.5	73.1	81.2	2
+ 0.42	+ 0.98	+ 1.01	+ 0.70	+ 0.98	+ 1.88	+ 0.05	- 0.68	- 1.70	- 1.41	- 1.52	- 1.05	
112.4	100.0	101.7	147.3	167.8	157.9	99.9	46.2	126.7	195.9	210.7	258.3	3
+ 0.45	- 0.04	- 0.16	+ 0.91	+ 1.30	+ 0.87	- 0.85	- 2.44	- 0.45	+ 1.25	+ 1.49	+ 2.30	
83.7	100.0	105.3	152.3	186.4	228.0	219.6	186.1	225.4	274.1	314.8	316.3	4
- 0.93	- 0.90	- 1.31	- 0.07	+ 0.66	+ 1.68	+ 0.73	- 1.20	- 0.27	+ 1.03	+ 2.02	+ 1.46	
72.9	100.0	110.4	123.1	131.6	178.5	158.2	114.9	132.8	199.1	213.9	222.7	5
- 0.38	+ 0.44	+ 0.41	+ 0.50	+ 0.37	+ 2.18	+ 0.60	- 2.13	- 1.78	+ 1.01	+ 1.21	+ 1.09	
91.1	100.0	130.8	171.3	306.6	417.7	423.3	286.6	314.3	388.9	392.2	412.7	
- 0.78	- 1.05	- 0.99	- 0.79	+ 0.82	+ 2.07	+ 1.76	- 0.68	- 0.67	+ 0.04	- 0.32	- 0.41	
97.9	100.0	98.3	97.7	109.5	86.7	58.8	44.0	56.7	55.8	75.2	107.8	
+ 1.05	+ 1.15	+ 1.08	+ 1.06	+ 1.59	+ 0.58	- 0.67	- 1.33	- 0.76	- 0.79	+ 0.09	+ 1.56	
85.8	100.0	120.3	141.0	137.1	121.2	97.1	49.6	43.3	52.2	61.3	97.4	6
+ 0.22	+ 0.55	+ 1.20	+ 1.76	+ 1.58	+ 1.05	+ 0.25	- 1.27	- 1.53	- 1.52	- 1.11	- 0.08	
89.0	100.0	102.3	114.1	125.8	103.5	98.7	100.4	106.7	122.6	137.2	149.0	7
- 0.15	+ 0.86	+ 0.72	+ 1.51	+ 2.28	- 0.24	- 1.06	- 1.25	- 1.00	+ 0.18	+ 1.24	+ 2.01	
93.2	100.0	115.6	126.6	141.1	126.7	116.7	51.7	34.6	43.4	41.9	51.7	8
+ 0.19	+ 0.41	+ 0.92	+ 1.28	+ 1.75	+ 1.27	+ 0.94	- 1.21	- 1.78	- 1.49	- 1.55	- 1.23	
92.0	100.0	107.9	119.5	134.2	102.3	75.7	35.2	21.8	25.3	28.5	30.8	9
+ 0.02	+ 0.44	+ 0.85	+ 1.40	+ 2.07	+ 1.03	+ 0.19	- 1.16	- 1.53	- 1.27	- 1.03	- 0.82	
86.7	100.0	107.5	122.9	162.9	118.6	83.3	71.5	78.2	88.7	98.2	108.1	10
- 0.06	+ 0.41	+ 0.64	+ 1.21	+ 2.83	+ 0.84	- 0.76	- 1.10	- 1.17	- 0.81	- 0.50	- 0.16	
45.1	100.0	98.5	78.0	156.2	114.3	82.0	28.3	52.8	58.0	99.7	129.8	11
- 0.78	+ 0.91	+ 0.82	+ 0.13	+ 2.56	+ 1.19	+ 0.13	- 1.61	- 0.88	- 0.76	+ 0.52	+ 1.43	
89.5	100.0	97.8	109.9	114.7	91.3	66.8	55.2	65.1	75.9	90.8	102.7	12
+ 0.52	+ 1.08	+ 0.92	+ 1.57	+ 1.81	+ 0.47	- 0.93	- 1.60	- 1.08	- 0.58	+ 0.30	+ 0.94	
69.8	100.0	86.2	116.8	156.8	84.7	46.2	26.7	31.7	65.4	87.9	79.2	13
+ 0.38	+ 1.13	+ 0.67	+ 1.43	+ 2.44	+ 0.38	- 0.75	- 1.37	- 1.31	- 0.47	+ 0.07	- 0.25	
96.3	100.0	98.2	102.8	110.2	88.9	75.0	59.3	70.4	73.8	78.0	90.5	14
+ 0.78	+ 1.05	+ 0.94	+ 1.28	+ 1.81	+ 0.35	- 0.60	- 1.68	- 0.89	- 0.64	- 0.33	+ 0.56	
85.7	100.0	87.3	100.8	110.5	111.1	98.4	76.2	85.3	78.6	67.6	71.2	15
+ 0.62	+ 1.34	+ 0.33	+ 0.99	+ 1.42	+ 1.26	+ 0.25	- 1.37	- 0.99	- 1.61	- 2.51	- 2.48	
107.8	100.0	113.5	112.5	116.2	113.2	102.8	102.2	106.2	115.4	123.3	130.7	16
+ 0.69	- 0.52	+ 0.99	+ 0.65	+ 0.91	+ 0.31	- 1.24	- 1.52	- 1.22	- 0.27	+ 0.52	+ 1.25	

Product

1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	NP
121.6	100.0	202.5	338.6	632.4	392.1	349.3	122.1	128.1	91.9	178.0	145.2	1
- 0.45	- 0.72	- 0.21	- 1.02	- 2	- 32	- 0.7	- 0.57	- 0.21	- 0.48	- 0.12	- 0.24	
121.9	100.0	111.0	103.0	254.2	59.1	21.2	84.7	31.1	16.5	36.7	54.2	2
- 0.87	- 1.13	- 0.17	- 0.26	+ 0.97	+ 2.54	+ 0.72	- 0.92	- 1.24	+ 0.16	- 1.30	- 0.98	

Indexes and Cycles of Economic Time Series showing (a) Trend Point of 1919, (b) The
Volume of Business and (d) The Standard Deviation

Table 5. Building

No.	Classification	(a)		Index	1919	1920	1921	1922	1923	1924
		c.	d.							
	Building Permits - Concl.		d.							
3	Quebec, Province of -	a. 96.26	b. - 2.19	Index	-	51.7	68.5	71.9	84.1	100.9
		c. .930	d. 37.01	Cycle	-	- 1.20	- 0.69	- 0.54	- 0.15	+ 0.36
4	Montreal and Maisonneuve	a. 19.55	b. - 0.12		31.6	44.3	67.1	66.6	85.5	97.8
		c. .853	d. 40.6		- 1.18	- 0.86	- 0.30	- 0.31	+ 0.16	+ 0.46
5	Quebec, City of -	a. 121.67	b. - 3.13		54.2	58.4	93.8	137.0	121.5	186.1
		c. .707	d. 48.72		- 1.38	- 1.23	- 0.44	+ 0.51	+ 0.25	+ 1.64
6	Ontario	a. 125.56	b. - 4.97		-	89.7	90.8	124.5	114.2	87.7
		c. .982	d. 35.84		-	- 1.00	- 0.83	+ 0.25	+ 0.10	- 0.50
7	Hamilton	a. 169.21	b. - 5.31		162.6	138.7	148.3	157.5	174.3	105.8
		c. .739	d. 55.56		- 0.12	- 0.45	- 0.19	+ 0.08	+ 0.47	- 0.66
8	London	a. 84.89	b. - 3.22		67.8	59.3	69.8	72.0	90.1	58.4
		c. .778	d. 19.13		- 0.89	- 1.17	- 0.45	- 0.17	+ 0.95	- 0.54
9	Ottawa	a. 136.66	b. - 2.95		104.9	106.6	87.6	161.9	113.5	81.9
		c. .694	d. 50.42		- 0.63	- 0.54	- 0.86	+ 0.48	- 0.23	- 0.79
10	Toronto	a. 122.68	b. - 3.06		75.4	98.9	91.7	135.4	117.6	91.9
		c. .912	d. 45.92		- 1.03	- 0.45	- 0.54	+ 0.48	+ 0.16	- 0.34
11	Windsor	a. 77.11	b. - 3.87		35.5	66.3	70.0	56.6	64.5	60.5
		c. .717	d. 22.40		- 1.86	- 0.31	+ 0.03	- 0.40	+ 0.13	+ 0.12
12	Manitoba	a. 77.41	b. - 3.08		-	83.4	60.5	69.0	46.7	34.9
		c. .956	d. 27.42		-	+ 0.22	- 0.50	- 0.08	- 0.78	- 1.10
13	Winnipeg	a. 67.18	b. - 1.74		28.4	80.8	53.9	66.4	43.3	30.7
		c. .833	d. 30.27		- 1.28	+ 0.51	- 0.32	+ 0.15	- 0.56	- 0.92
14	Saskatchewan	a. 82.69	b. 0.22		-	80.9	52.6	61.0	56.9	43.8
		c. .973	d. 69.62		-	- 0.02	- 0.44	- 0.32	- 0.67	- 0.57
15	Regina	a. 61.04	b. 0.02		40.0	61.2	50.9	42.1	29.8	22.2
		c. .859	d. 58.81		- 0.36	+ 0.002	- 0.17	- 0.32	- 0.53	- 0.66
16	Alberta	a. 139.27	b. - 0.94		-	156.8	101.3	139.1	63.1	89.8
		c. .840	d. 102.42		-	+ 0.17	- 0.56	+ 0.02	- 0.72	- 0.45
17	Calgary	a. 131.14	b. 0.72		110.7	145.4	115.0	155.2	41.1	51.6
		c. .766	d. 135.16		- 0.15	+ 0.10	- 0.13	+ 0.16	- 0.70	- 0.62
18	British Columbia	a. 66.72	b. - 1.61		-	34.1	38.7	57.5	44.7	54.5
		c. .973	d. 30.36		-	- 1.07	- 0.87	- 0.20	- 0.57	- 0.19
19	Vancouver	a. 42.65	b. 3.24		-	27.9	32.5	54.9	40.9	48.4
		c. .336	d. 21.56		-	0.68	- 0.62	+ 0.27	- 0.53	- 0.33

Table 6. The

	Exports -									
1	Wheat	a. 67.76	b. 1.96		27.3	49.2	58.7	83.7	97.1	85.9
		c. .752	d. 23.44		- 1.73	- 0.88	- 0.55	+ 0.43	+ 0.92	+ 0.36
2	Oats	a. 146.67	b. - 6.77		64.9	79.7	178.6	163.3	119.6	191.6
		c. .230	d. 51.85		- 1.58	- 1.16	+ 0.88	+ 0.71	+ 0.001	+ 1.52
3	Barley	a. 57.16	b. - 0.65		36.2	27.1	35.4	42.6	41.0	65.1
	Average cash price per bushel -	c. .542	d. 31.10		- 0.67	- 0.95	- 0.66	- 0.41	- 0.44	+ 0.36
4	Wheat, No. 1, Northern	a. 137.74	b. - 6.73		158.6	167.9	110.3	82.6	72.5	85.2
		c. .335	d. 20.49		+ 1.02	+ 1.80	- 0.68	- 1.71	- 1.87	- 0.92
5	Oats, No 2, C.W.	a. 132.89	b. 4.96		160.6	170.1	85.2	88.0	84.0	88.3
		c. .502	d. 23.83		+ 1.16	+ 1.77	- 1.58	- 1.26	- 1.22	- 0.83

Annual Increment, (c) The Coefficient of Correlation with the Index of the Physical
from the Trend based on 1919 or 1920 to 1934.

Permits - Concluded.

1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	No.
83.4	100.0	138.3	118.4	137.5	109.6	89.2	29.6	16.6	14.2	24.2	20.5	1
- 0.05	+ 0.46	+ 1.55	+ 1.97	+ 1.65	+ 0.95	+ 0.46	- 1.09	- 1.38	- 1.39	- 1.06	- 1.10	2
80.5	100.0	142.5	114.6	145.2	118.2	100.5	33.3	17.8	12.9	23.4	21.8	3
+ 0.04	+ 0.52	+ 1.57	+ 0.89	+ 1.64	+ 0.98	+ 0.55	- 1.10	- 1.48	- 1.59	- 1.33	- 1.37	4
83.1	100.0	161.5	145.0	144.3	124.7	102.8	29.9	18.4	10.5	54.4	20.8	5
- 0.41	+ 0.005	+ 1.33	+ 1.06	+ 1.11	+ 0.77	+ 0.38	- 1.05	- 1.22	- 1.32	- 0.35	- 0.98	6
91.6	100.0	122.2	160.3	145.4	105.6	67.9	25.8	13.9	22.0	36.4	29.4	7
- 0.25	+ 0.12	+ 0.88	+ 2.08	+ 1.80	+ 0.83	- 0.08	- 1.12	- 1.31	- 0.95	- 0.41	- 0.46	8
85.5	100.0	122.6	202.7	224.0	201.1	160.6	45.5	16.3	24.7	60.0	46.9	9
- 0.93	- 0.58	- 0.07	+ 1.46	- 1.94	+ 1.63	+ 0.99	- 0.98	- 1.41	- 1.17	- 0.44	- 0.58	10
66.0	100.0	77.7	70.8	66.5	75.8	48.2	15.7	15.2	18.6	50.7	18.5	11
+ 0.02	+ 1.97	+ 0.97	+ 0.78	+ 0.72	+ 1.38	+ 0.10	- 1.43	- 1.29	- 0.94	+ 0.91	- 0.61	12
159.3	100.0	207.8	174.8	109.7	203.0	101.7	50.0	29.5	40.5	131.9	58.2	13
+ 0.30	- 0.32	+ 1.88	+ 1.28	+ 0.05	+ 1.96	+ 0.01	- 0.96	- 1.31	- 1.03	+ 0.84	- 1.40	14
99.1	100.0	120.2	198.3	183.3	123.4	84.5	30.2	17.0	28.8	38.3	45.9	15
- 0.11	- 0.03	+ 0.48	+ 2.25	+ 1.99	+ 0.75	- 0.03	- 1.15	- 1.37	- 1.04	- 0.77	- 0.54	16
59.2	100.0	67.4	61.7	76.1	30.7	6.0	11.6	1.0	2.3	9.2	9.6	17
+ 0.24	+ 2.23	+ 0.95	+ 0.87	+ 1.68	- 0.17	- 1.10	- 0.68	- 0.98	- 0.30	- 0.27	- 0.08	18
46.9	100.0	77.2	106.8	108.3	68.8	44.7	21.5	7.7	7.5	26.6	14.1	19
- 0.55	+ 1.50	+ 0.78	+ 1.97	+ 2.14	+ 0.81	+ 0.04	- 0.69	- 1.08	- 0.98	- 0.17	- 0.51	20
49.1	100.0	73.0	101.8	106.6	64.2	42.4	20.5	7.2	6.8	26.3	13.6	21
- 0.55	+ 1.49	+ 0.65	+ 1.66	+ 1.88	+ 0.53	- 0.13	- 0.79	- 1.18	- 1.13	- 0.43	- 0.79	22
38.8	100.0	121.5	206.1	259.7	146.2	58.1	36.4	8.1	11.1	14.0	8.9	23
- 0.65	+ 0.23	+ 0.54	+ 1.75	+ 2.51	+ 0.88	- 0.39	- 0.70	- 1.11	- 1.07	- 1.03	- 1.11	24
28.5	100.0	82.1	156.0	236.2	70.0	37.7	6.5	8.9	6.9	14.9	8.5	25
- 0.56	+ 0.66	+ 0.36	+ 1.61	+ 2.98	+ 0.15	- 0.40	- 0.93	- 0.89	- 0.93	- 0.79	- 0.90	26
69.6	100.0	131.2	250.1	436.3	229.9	115.0	54.5	23.0	30.7	41.6	48.1	27
- 0.65	- 0.33	- 0.01	+ 1.16	+ 2.98	+ 0.98	- 0.14	- 0.72	- 1.02	- 0.93	- 0.82	- 0.74	28
59.9	100.0	116.6	315.3	571.1	202.8	97.2	45.9	22.5	34.4	45.0	43.0	29
- 0.57	- 0.27	- 0.15	+ 1.33	+ 3.25	+ 0.48	- 0.32	- 0.71	- 0.89	- 0.81	- 0.73	- 0.75	30
67.9	100.0	83.9	96.3	107.0	69.8	46.5	14.2	8.5	8.2	18.6	23.1	31
+ 0.30	+ 1.41	+ 0.94	+ 1.40	+ 1.80	+ 0.63	- 0.08	- 1.09	- 1.22	- 1.19	- 0.79	- 0.59	32
61.4	100.0	72.7	84.8	94.1	63.9	43.9	124.4	68.2	61.9	17.0	20.2	33
+ 0.12	+ 1.76	+ 0.34	+ 0.75	+ 1.02	- 0.52	- 1.60	+ 1.99	- 0.77	- 1.21	- 3.45	- 3.45	34

Grain Trade

												No.
88.9	100.0	102.0	146.1	84.3	83.1	77.9	91.2	76.9	67.1	66.2	97.2	1
+ 0.40	+ 0.79	+ 0.79	+ 2.59	- 0.13	- 0.27	- 0.57	- 0.09	- 0.78	- 1.28	- 1.40	- 0.17	2
222.9	100.0	52.8	86.4	41.4	11.9	60.2	37.1	72.4	41.5	77.4	45.7	3
+ 2.25	+ 0.01	- 1.13	+ 0.01	- 0.72	- 1.11	- 0.10	+ 0.47	- 0.38	+ 0.32	+ 0.75	+ 0.27	4
96.0	100.0	92.7	105.9	48.9	8.2	69.9	28.8	5.8	32.8	21.1	54.5	5
+ 1.37	+ 1.52	+ 1.31	+ 1.76	- 0.06	- 1.34	+ 0.66	- 0.64	- 1.36	- 0.47	- 0.83	+ 0.27	6
109.8	100.0	99.0	90.2	89.8	63.0	39.3	37.2	40.8	50.0	56.4	62.7	7
+ 0.61	+ 0.46	+ 0.74	+ 0.64	+ 0.94	- 0.03	- 0.87	0.61	- 0.12	+ 0.64	+ 1.29	+ 1.92	8
101.8	100.0	113.3	113.0	115.9	80.7	52.9	53.1	53.8	70.4	70.1	73.2	9
- 0.06	+ 0.08	+ 0.84	+ 1.04	+ 1.37	+ 0.10	- 0.86	- 0.64	- 0.40	+ 0.50	+ 0.69	+ 1.03	10

Indexes and Cycles of Economic Time Series showing (a) Trend Point of 1919, (b) The
 Volume of Business and (d) The Standard Deviation

Table 6. The Grain

No.	Classification	(a, b, c, d)		1919	1920	1921	1922	1923	1924
		c.	d.						
	The Grain Trade - Concl'd.								
	Average Cash Price per bushel -								
6	Barley No. 3, C.W. ...	a. 169.87 c. .350	b. ~ 7.99 d. .32.74	Index 194.8 cycle + 0.75	239.3 + 2.36	118.4 - .98	95.2 1.55	87.1 - 1.55	121.3 ~ 0.26

Table 7. Imports and

1	Imports -								
1	Vegetable Products ...	a. 110.98 c. .850	b. ~ 3.24 d. .946	95.5 - 0.80	130.5 + 1.17	93.8 - 0.55	85.1 1.32	86.5 - 0.59	83.6 - 0.57
2	Animal Products	a. 127.77 c. .836	b. ~ 4.92 d. 28.57	145.4 + 0.62	145.3 + 0.79	81.9 - 1.26	89.1 0.64	86.8 - 0.75	76.6 - 0.93
3	Textiles	a. 120.49 c. .726	b. ~ 4.62 d. 23.21	100.1 - 0.88	163.6 + 2.06	70.2 - 1.77	86.4 0.63	96.9 - 0.22	90.1 - 0.31
4	Wood and Paper	a. 105.29 c. .899	b. ~ 2.30 d. 25.18	85.7 - 0.78	126.4 + 0.93	82.3 - 0.73	75.4 0.91	86.2 - 0.39	83.3 - 0.42
5	Iron and its Products	a. 95.34 c. .929	b. ~ 1.89 d. 35.50	83.3 - 0.34	116.3 + 0.64	58.0 - 0.95	57.3 0.93	79.1 - 0.24	62.8 - 0.65
6	Non-ferrous Metals ...	a. 101.69 c. .927	b. ~ 1.07 d. 39.48	90.1 - 0.29	121.3 + 0.52	62.1 - 0.95	68.4 0.73	83.6 - 0.35	82.1 - 0.36
7	Non-metallic Minerals	a. 102.96 c. .225	b. ~ 1.93 d. 21.94	77.2 - 1.17	125.7 + 1.12	100.2 + 0.05	83.1 0.62	108.1 + 0.59	88.5 - 0.22
8	Chemicals and allied Products	a. 94.78 c. .701	b. ~ 0.30 d. 17.15	86.6 - 0.48	129.5 + 2.01	79.8 - 0.91	81.9 0.80	83.4 - 0.73	78.3 - 1.05
9	Miscellaneous Commodities	a. 109.32 c. .835	b. ~ 2.63 d. 21.16	108.5 - 0.04	126.4 + 0.93	90.4 - 0.65	77.8 1.12	82.1 - 0.79	79.5 - 0.79
	Exports								
10	Vegetable Products ...	a. 87.44 c. .767	b. ~ 2.55 d. 20.52	67.8 - 0.96	82.3 - 0.13	60.1 - 1.05	57.1 0.60	70.7 - 0.32	75.6 + 0.04
11	Animal Products	a. 135.88 c. .353	b. ~ 6.66 d. 23.66	192.7 + 2.40	131.4 + 0.09	84.1 - 1.63	80.6 1.49	81.4 - 1.18	91.2 - 0.48
12	Textiles	a. 240.14 c. .078	b. ~ 12.65 d. 71.82	409.2 + 2.35	354.4 + 1.77	110.7 - 1.45	97.3 1.46	117.6 - 1.00	130.3 - 0.65
13	Wood and Paper	a. 93.26 c. .769	b. ~ 1.69 d. 18.03	67.5 - 1.43	101.9 + 0.57	65.0 - 1.38	74.5 0.63	93.5 + 0.39	89.2 + 0.24
14	Iron and Its Products	a. 102.41 c. .775	b. ~ 3.83 d. 26.84	119.4 + 0.63	111.8 + 0.49	43.2 - 1.92	55.3 1.33	88.7 + 0.06	77.6 - 0.21
15	2/ Non-ferrous Metals ...	a. 42.21 c. .374	b. ~ 8.68 d. 27.46	65.2 + 0.84	63.7 + 0.47	31.2 - 1.03	45.3 0.84	65.1 - 0.43	97.2 + 0.42
16	Non-metallic Minerals	a. 122.19 c. .702	b. ~ 4.51 d. 18.50	111.2 - 0.59	152.7 + 1.89	92.6 - 1.11	89.2 1.04	109.4 + 0.28	77.8 - 1.18
17	Chemicals and allied Products	a. 119.57 c. .477	b. ~ 2.74 d. 25.56	173.6 + 2.11	135.7 + 0.74	62.3 - 2.03	75.1 1.42	96.1 - 0.49	92.8 - 0.51
18	Miscellaneous Commodities	a. 232.89 c. 0.47	b. ~ 14.03 d. 92.18	525.0 + 3.17	270.3 + 0.56	86.2 - 1.29	79.2 1.21	97.5 - 0.86	87.3 - 0.82

1/ See Heading above for definition of a, b, c, and d. 2/ Including non-monetary gold.

9. The same figure shows the coefficient of correlation in the order of the Physical

from the Trend based on 1919 to 1934.

Trade - Concluded

1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	No.
128.3	100.0	129.1	128.5	116.6	63.4	49.6	56.2	56.7	74.6	86.0	83.2	6
+ 0.19	- 0.42	+ 0.71	+ 0.93	+ 0.81	- 0.57	- 0.74	- 0.30	- 0.04	+ 0.75	+ 1.34	+ 1.50	

Exports in Value by Groups

93.1	100.0	110.9	112.2	110.5	91.3	63.8	46.3	41.6	51.8	52.1	59.9	1
+ 0.08	+ 0.60	+ 1.33	+ 1.56	+ 1.64	+ 0.82	- 0.43	- 1.16	- 1.23	- 0.54	- 0.56	+ 0.21	
85.3	100.0	113.7	131.3	131.1	110.4	53.5	32.7	33.0	37.8	12.7	48.7	2
- 0.45	+ 0.23	+ 0.89	+ 1.67	+ 1.84	+ 1.29	- 0.53	- 1.09	- 0.91	- 0.57	0.24	+ 0.15	
97.7	100.0	99.6	109.5	108.0	81.0	48.9	37.4	38.1	45.5	46.2	53.7	3
- 0.21	+ 0.51	+ 0.69	+ 1.32	+ 1.45	+ 0.49	- 0.70	- 0.99	- 0.76	- 0.25	- 0.01	+ 0.57	
84.8	100.0	108.5	123.4	135.3	107.6	75.2	49.2	40.4	44.9	48.4	58.7	4
- 0.27	+ 0.43	+ 0.86	+ 1.54	+ 2.11	+ 1.10	- 0.10	- 1.04	- 1.30	- 1.03	0.80	- 0.23	
75.9	100.0	113.0	144.8	153.0	101.2	52.6	30.7	27.7	42.6	53.1	61.6	5
- 0.23	+ 0.50	+ 0.92	+ 1.87	+ 2.16	+ 0.75	- 0.57	- 1.13	- 1.16	- 0.69	2.40	- 0.05	
92.0	100.0	116.6	145.5	191.4	137.4	77.7	43.3	35.5	51.1	65.2	69.0	6
0.09	+ 0.15	+ 0.59	+ 1.35	+ 2.54	+ 1.20	- 0.28	- 1.13	- 1.30	- 0.87	0.47	0.41	
44.9	100.0	101.8	106.2	121.8	108.0	69.5	62.4	51.2	66.8	68.0	75.6	7
- 2.12	+ 0.48	+ 0.65	+ 0.94	+ 1.74	+ 1.20	- 0.47	- 0.71	- 1.23	- 0.33	- 0.19	0.29	
38.2	100.0	106.2	117.9	128.0	117.3	99.9	88.9	76.8	89.8	94.9	102.0	8
- 0.49	+ 0.18	+ 0.53	+ 1.19	+ 1.76	+ 1.12	+ 0.09	- 0.57	- 1.29	- 0.55	0.2	- 0.12	
84.9	100.0	106.2	111.2	127.1	108.9	80.6	56.2	43.8	50.0	52.4	66.1	9
- 0.41	+ 0.43	+ 0.85	+ 1.21	+ 2.08	+ 1.35	+ 0.13	- 0.89	- 1.36	- 0.94	- 0.70	- 0.10	
95.5	100.0	92.8	110.6	73.0	53.7	35.6	34.6	33.7	38.9	29.0	75.9	10
- 1.14	+ 1.48	+ 1.26	+ 2.25	- 0.54	- 0.28	- 1.04	- 0.96	- 0.88	- 0.50	0.37	+ 0.72	
115.5	100.0	98.0	97.3	83.8	54.5	42.2	33.1	40.0	49.1	57.9	74.2	11
0.83	+ 0.45	+ 0.65	+ 0.90	+ 0.61	- 0.34	- 0.58	- 0.68	- 0.11	+ 0.55	- 1.21	+ 2.18	
132.8	100.0	153.6	136.8	133.2	102.7	75.8	67.7	99.1	103.1	17.6	111.9	12
- 0.44	- 0.72	+ 0.20	+ 0.15	+ 0.27	+ 0.02	- 0.17	- 0.11	+ 0.50	+ 0.73	- 1.28	- 7.3	
95.6	100.0	98.1	101.1	102.2	87.2	64.8	46.8	45.9	51.1	41.2	73.8	13
- 0.69	+ 1.03	+ 1.02	+ 1.28	+ 1.43	+ 0.69	- 0.45	- 1.36	- 1.31	- 0.66	0	- 0.31	
91.9	100.0	89.7	93.5	119.2	62.9	25.3	21.6	29.3	49.5	2.4	- 1.2	
- 0.46	+ 0.91	+ 0.67	+ 0.95	+ 2.05	+ 0.10	- 1.16	- 1.16	- 0.73	+ 0.17	+ 1.43	+ 1.19	
118.9	100.0	103.3	126.2	172.6	132.7	98.2	115.3	153.8	228.3	247.6	242.8	14
- 0.90	- 0.11	- 0.30	+ 0.21	+ 1.59	- 0.18	+ 1.75	- 1.45	- 0.36	+ 2.04	+ 2.42	- 1.91	
90.4	100.0	99.9	98.1	109.7	84.4	55.3	35.6	49.1	58.2	66.1	88.5	15
- 0.26	+ 0.51	+ 0.75	+ 0.89	+ 1.76	+ 0.64	- 0.69	- 1.51	- 0.54	+ 0.20	- 0.87	- 2.42	
105.2	100.0	104.1	111.3	132.7	99.0	65.8	66.9	76.4	87.0	99.1	107.7	16
+ 0.68	- 0.02	+ 0.20	+ 0.64	+ 1.57	+ 0.37	- 0.82	- 0.67	- 0.19	+ 0.33	+ 0.92	+ 1.36	
95.9	100.0	95.9	102.4	116.6	109.5	87.9	59.9	60.4	68.6	73.0	89.4	17
- 0.57	- 0.38	- 0.27	- 0.05	+ 0.26	+ 0.34	+ 0.25	+ 0.10	+ 0.26	+ 0.50	+ 0.70	+ 1.03	

Indexes and Cycles of Economic Time Series showing (a) Trend Point of 1919, (b) The
Volume of Business and (d) The Standard Deviation

Table 8. Railway

No.	Classification	(a. c.)		Index Cycle	1919	1920	1921	1922	1923	1924
		b. ..	d. ..							
1	Railway Freight Loaded -									
	Total Agricultural Products 2/	a. 95.53	b. - 1.58	Index	- 62.0	83.4	96.0	98.0	95.4	
2	Wheat 2/	c. .573	d. 16.11	Cycle	- 2.08	- 0.65	+ 0.23	+ 0.45	+ 0.38	
	Oats 2/	a. 89.11	b. - 0.61		- 46.4	73.6	94.6	103.6	86.9	
		c. .512	d. 21.76		- 1.96	- 0.68	+ 0.31	+ 0.75	+ 0.11	
3	Oats 2/	a. 142.09	b. - 6.83		- 88.0	167.1	147.1	119.4	148.8	
		c. .246	d. 22.30		- 2.43	+ 1.43	+ 0.84	- 0.10	+ 1.53	
4	Flour	a. 108.43	b. - 2.41	113.8	74.4	89.7	102.0	111.1	108.1	
		c. .629	d. 12.53	+ 0.43	- 2.52	- 1.11	+ 0.06	+ 0.98	+ 0.94	
5	Hay and Straw	a. 111.60	b. - 5.32	125.0	132.3	68.7	73.5	79.5	95.4	
		c. .207	d. 15.91	+ 0.84	+ 1.64	- 2.03	- 1.39	- 0.68	+ 0.65	
6	Wool	a. 119.51	b. - 3.58	140.4	93.1	86.5	103.7	106.3	120.8	
		c. .924	d. 19.92	+ 1.05	- 1.15	- 1.30	- 0.25	+ 0.06	+ 0.96	
7	Hides and Leather ..	a. 120.15	b. - 4.29	141.2	105.1	90.5	107.8	91.8	92.6	
		c. .469	d. 12.42	+ 1.69	- 0.87	- 1.70	+ 0.04	- 0.90	- 0.49	
8	Total Mine Products 2/	a. 90.03	b. - 0.33	-	95.2	70.0	74.9	86.4	79.3	
		c. .999	d. 19.43	-	+ 0.27	- 1.01	- 0.74	- 0.14	- 0.48	
9	Bituminous Coal	a. 133.37	b. - 3.77	129.6	144.0	110.3	122.5	128.8	114.6	
		c. .609	d. 10.23	- 0.37	+ 1.41	- 1.52	+ 0.04	+ 1.03	+ 0.01	
10	Refined Petroleum and its Products ..	a. 54.53	b. 6.62	48.9	50.4	64.6	71.0	76.5	79.5	
		c. .891	d. 18.17	- 0.31	- 0.59	- 0.17	- 0.19	- 0.25	- 0.45	
11	Sugar	a. 136.59	b. - 4.87	149.2	146.5	101.1	126.5	115.8	115.2	
		c. .230	d. 10.90	+ 1.16	+ 1.36	- 2.36	+ 0.41	- 0.12	+ 0.27	
12	Iron, pig and bloom.	a. 184.39	b. - 10.57	276.0	281.4	65.5	86.5	124.6	78.2	
		c. .238	d. 51.91	+ 1.76	+ 2.07	- 1.88	- 1.27	- 0.34	- 1.03	
13	Bar and Sheet Iron, Structural Iron and	a. 127.75	b. - 4.41	193.7	144.1	47.1	78.9	105.2	73.7	
	Iron Pipe	c. .613	d. 35.40	+ 1.86	+ 0.59	- 2.03	- 1.01	- 0.14	- 0.90	
14	Liquor and beverages ..	a. 69.58	b. 1.39	49.0	69.5	46.4	49.5	65.8	82.6	
		c. .962	d. 27.88	- 0.74	- 0.05	- 0.93	- 0.87	- 0.34	+ 0.22	

1/ See Heading above for definition of a, b, c and d. 2/ 1920 - 1934.

Table 9. Railway

1	Canadian National Railway									
	Operating Revenues ...	a. 97.24	b. - 1.31		76.4	91.1	89.6	86.2	96.0	89.2
		c. .944	d. 15.22	- 1.37	- 0.32	- 0.33	- 0.47	+ 0.26	- 0.98	
2	Operating Expenses ...	a. 116.83	b. - 2.48	97.0	124.7	111.9	103.6	107.7	99.6	
		c. .827	d. 12.15	- 1.63	+ 0.85	+ 0.002	- 0.48	+ 0.65	- 0.40	
3	No. of Tons Carried ...	a. 114.39	b. - 2.93	103.8	117.8	98.4	102.2	98.1	88.4	
		c. .932	d. 15.32	- 0.69	+ 0.41	- 0.66	- 0.22	- 0.30	- 0.74	
4	Passengers Carried ...	a. 113.83	b. - 4.86	117.7	105.1	95.8	90.8	90.2	87.0	
		c. .799	d. 8.32	+ 0.47	- 0.47	- 1.00	- 1.02	- 0.50	- 0.30	
5	Canadian Pacific Railway									
	Operating Revenues ...	a. 107.99	b. - 2.45	89.5	109.9	97.4	93.6	97.6	91.4	
		c. .929	d. 13.95	- 1.33	+ 0.31	- 0.41	- 0.50	- 0.04	- 0.31	

Annual Increment, (c) The Coefficient of Correlation with the index of the Physical
from the Trend based on 1919 to 1934.

Freight Loaded

1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	No.
98.1	100.0	93.1	124.2	79.4	72.2	68.2	72.8	61.3	63.0	60.3	63.1	1
+ 0.65	+ 0.87	+ 0.54	+ 2.56	- 0.12	- 0.47	- 0.62	- 0.24	- 0.85	- 0.65	- 0.72	- 0.44	
97.4	100.0	98.3	142.2	76.4	72.1	69.7	82.2	66.2	63.0	62.3	38.2	2
+ 0.52	+ 0.67	+ 0.62	+ 2.66	- 0.33	- 0.50	- 0.58	+ 0.02	- 0.69	- 0.81	- 0.81	- 1.89	
119.7	100.0	65.8	95.7	72.3	50.6	66.0	59.0	49.2	65.5	54.0	54.2	3
+ 0.53	- 0.05	- 1.28	+ 0.37	- 0.37	- 1.04	- 0.04	- 0.05	- 0.18	+ 0.85	0.65	+ 0.96	
98.5	100.0	98.0	104.2	99.0	77.1	71.3	68.3	66.4	63.7	59.7	62.9	4
+ 0.36	+ 0.67	+ 0.71	+ 1.39	+ 1.17	- 0.38	- 0.66	- 0.70	- 0.66	- 0.68	- 0.81	- 0.36	
80.1	100.0	68.5	57.9	55.1	59.7	43.1	33.1	23.5	51.8	44.6	31.2	5
+ 0.03	+ 1.61	- 0.03	- 0.37	- 0.21	+ 0.42	- 0.29	- 0.59	- 0.86	+ 1.26	+ 1.14	+ 0.63	
119.6	100.0	86.6	125.1	69.5	52.2	64.2	50.7	96.8	67.0	70.1	81.1	6
+ 1.08	+ 0.28	- 0.21	+ 1.90	- 0.71	- 1.40	- 0.62	- 1.12	+ 1.38	+ 0.06	+ 0.40	+ 1.13	
100.1	100.0	106.2	94.5	81.5	66.9	62.3	43.0	64.7	59.9	78.2	77.2	7
+ 0.46	+ 0.80	+ 1.64	+ 1.04	+ 0.34	- 0.49	- 0.51	- 1.72	+ 0.37	+ 0.33	+ 2.14	+ 2.41	
78.5	100.0	107.2	112.4	128.3	108.1	78.2	59.8	58.5	79.0	83.1	93.7	8
- 0.51	+ 0.62	+ 1.00	+ 1.29	+ 2.12	+ 1.10	- 0.42	- 1.35	- 1.40	- 0.33	- 0.10	+ 0.46	
102.6	100.0	109.0	100.6	111.0	93.6	79.7	68.8	71.7	94.7	91.1	101.1	9
- 0.80	- 0.68	+ 0.57	+ 0.11	+ 1.50	+ 0.17	- 0.82	- 1.52	- 0.87	+ 1.75	+ 1.76	+ 3.11	
88.0	100.0	116.9	145.6	162.7	151.9	134.6	127.3	118.9	130.1	127.8	132.0	10
- 0.34	- 0.05	+ 0.52	+ 1.73	+ 2.31	+ 1.35	+ 0.03	- 0.73	- 1.56	- 1.31	- 1.79	- 1.93	
115.8	100.0	86.4	88.1	82.1	77.1	66.5	76.2	71.5	83.1	90.5	94.9	11
+ 0.77	- 0.23	- 1.03	- 0.43	- 0.53	- 0.54	- 1.07	+ 0.27	+ 0.28	+ 1.79	+ 2.92	+ 3.77	
76.5	100.0	94.2	117.4	119.4	88.8	65.6	28.2	29.1	50.4	74.4	64.9	12
- 0.86	- 0.20	- 0.11	+ 0.54	+ 0.78	+ 0.40	+ 0.16	- 0.36	- 0.14	+ 0.47	+ 0.75	+ 1.16	
80.1	100.0	106.0	114.1	144.3	107.9	86.6	45.6	31.8	55.8	77.2	88.1	13
- 0.60	+ 0.88	+ 0.38	+ 0.74	+ 1.71	+ 0.81	+ 0.33	- 0.70	- 0.97	- 0.16	+ 0.57	+ 1.00	
93.1	100.0	112.6	133.6	130.1	105.8	73.6	52.8	45.5	70.1	76.5	88.5	14
+ 0.54	+ 0.74	+ 1.14	+ 1.85	+ 1.67	+ 0.75	- 0.45	- 1.25	- 1.56	- 0.73	- 0.55	- 0.17	

Operating Statistics

1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	No.
92.3	100.0	100.9	115.5	110.1	94.6	76.1	62.1	56.2	62.4	58.5	68.4	1
+ 0.19	+ 0.78	+ 0.93	+ 1.97	+ 1.71	+ 0.77	- 0.36	- 1.90	- 1.49	- 1.00	- 1.17	- 0.43	
96.9	100.0	104.4	114.5	114.2	103.3	90.3	70.6	64.4	68.5	71.0	76.5	2
- 0.42	+ 0.04	+ 0.61	+ 1.65	+ 1.82	+ 1.13	+ 0.27	- 1.15	- 1.46	- 0.92	- 0.50	+ 0.15	
91.2	100.0	101.7	121.4	114.9	97.7	71.0	58.9	52.1	61.0	61.8	68.3	3
- 0.37	+ 0.40	+ 0.70	+ 2.18	+ 1.95	+ 1.01	- 0.54	- 1.14	- 1.39	- 0.62	- 0.37	+ 0.24	
83.8	100.0	80.3	77.7	76.2	68.1	50.9	39.6	36.2	38.7	44.9	46.4	4
- 0.10	+ 2.43	+ 0.64	+ 0.91	+ 1.32	+ 0.93	- 0.55	- 1.33	- 1.15	- 0.27	+ 1.06	+ 1.83	
92.3	100.0	102.1	116.0	107.2	91.2	71.1	59.4	54.8	60.4	56.5	66.6	5
- 0.07	+ 0.66	+ 0.98	+ 2.15	+ 1.70	+ 0.73	- 0.54	- 1.20	- 1.35	- 0.78	- 0.88	+ 0.02	

Indexes and Cycles of Economic Time Series showing (a) The End Point of 1919, (b) The

Volume of Business and (d) The Standard Deviation

Table 9. Railway Operating

No.	Classification			Index	1919	1920	1921	1922	1923	1924
		(a. c.)	(b.) (d.)							
Canadian Pacific Railway Continued -										
6	Operating Expenses	a. 114.99	b. - 2.88		96.6	121.4	103.9	98.3	103.6	95.8
		c. .923	d. 13.15	Index	- 1.40	+ 0.71	- 0.41	- 0.61	+ 0.01	- 0.36
7	No. of Tons Carried ...	a. 90.83	b. - 0.76	Cycle	73.9	89.3	69.1	81.8	91.2	84.4
		c. .978	d. 17.77		- 0.95	- 0.43	- 1.14	- 0.38	+ 0.19	- 0.15
8	Passengers Carried	a. 127.38	b. - 4.83		116.8	124.9	112.6	106.3	107.6	103.5
		c. .939	d. 8.60		- 1.23	+ 0.27	- 0.60	- 0.77	- 0.05	+ 0.03
All Railways -										
9	Operating Revenues	a. 102.31	b. - 1.95		82.8	99.7	92.8	89.3	96.9	90.3
		c. .946	d. 14.55		- 1.34	- 0.05	- 0.39	- 0.49	+ 0.16	- 0.16
10	Operating Expenses	a. 116.27	b. - 2.77		96.7	122.8	108.5	101.1	106.2	98.2
		c. .875	d. 12.42		- 1.58	+ 0.75	- 0.18	- 0.55	+ 0.08	- 0.34
11	Net Operating Revenues.	a. 50.67	b. 1.16		30.6	13.3	34.0	44.9	61.9	60.9
		c. .870	d. 28.22		- 0.71	- 1.37	- 0.67	- 0.33	+ 0.23	+ 0.16
12	No. of Tons Carried ...	a. 103.70	b. - 2.15		91.0	104.0	84.2	88.6	96.6	86.9
		c. .916	d. 16.66		- 0.76	+ 0.15	- 0.91	- 0.52	+ 0.09	- 0.36
13	Passengers Carried	a. 124.57	b. - 4.83		112.3	120.2	109.6	104.1	105.0	100.6
		c. .947	d. 9.39		- 1.31	+ 0.05	- 0.57	- 0.64	- 0.03	+ 0.02
14	Total Payroll	a. 110.92	b. - 2.23		94.5	117.7	100.3	94.5	100.9	95.2
		c. .909	d. 13.42		- 1.22	+ 0.67	- 0.46	- 0.73	- 0.08	- 0.34
15	Number of Employees ...	a. 109.77	b. - 2.00		102.5	109.5	99.1	98.0	103.0	98.1
		c. .950	d. 8.45		- 0.86	+ 0.20	- 0.79	- 0.68	+ 0.15	- 0.20

Table 10. Canal Traffic

Canal Cargo Traffic -										
1	Sault Ste. Marie	a. 169.45	b. - 3.06		290.7	174.1	140.4	120.1	158.5	114.6
		c. .249	d. 41.61		+ 2.91	+ 0.19	- 0.55	- 0.97	+ 0.03	- 0.95
2	Welland	a. 44.02	b. 8.58		41.6	43.6	59.0	65.0	72.0	96.6
		c. .257	d. 15.44		- 0.16	- 0.58	- 0.14	- 0.31	- 0.41	+ 0.63
3	St. Lawrence	a. 61.20	b. 4.22		47.2	50.1	61.0	70.5	74.2	90.4
		c. .422	d. 16.21		- 0.86	- 0.95	- 0.53	- 0.21	- 0.24	+ 0.50
4	Tonnage of Vessels cleared from Montreal	a. 51.55	b. 5.79		47.9	54.3	54.1	69.8	90.5	83.9
		c. .323	d. 24.58		- 0.15	- 0.12	- 0.37	+ 0.04	+ 0.64	+ 0.14

1/ See Heading above for definition of a, b, c and d.

Annual Increments. (c) The Coefficient of Correlation with the Index of the Industrial

from the Trend based on 1919 to 1934.

Statistics - Concluded.

1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	No.
93.9	100.0	106.0	115.7	109.5	92.8	74.9	63.1	57.4	61.4	65.3	70.3	6
- 0.29	+ 0.39	+ 1.07	+ 2.03	+ 1.77	+ 0.72	- 0.42	- 1.10	- 1.31	- 0.79	- 0.28	+ 0.32	
90.5	100.0	102.8	118.8	114.1	93.9	75.1	57.0	55.5	64.6	66.0	70.8	7
+ 0.24	+ 0.82	+ 1.58	+ 1.96	+ 1.74	+ 0.64	- 0.37	- 1.35	- 1.39	- 0.83	- 0.71	- 0.40	
99.8	100.0	100.2	97.8	93.2	82.6	62.7	52.5	47.6	50.4	49.3	49.0	8
+ 0.16	+ 0.75	+ 1.33	+ 1.62	+ 1.64	+ 0.97	- 0.78	- 1.41	- 1.41	- 0.53	- 0.10	+ 0.43	
92.2	100.0	101.1	114.2	108.2	92.0	72.6	59.4	54.3	60.3	62.2	67.2	9
+ 0.11	+ 0.78	+ 0.99	+ 2.02	+ 1.75	+ 0.77	- 0.43	- 1.21	- 1.42	- 0.88	- 0.62	- 0.13	
95.5	100.0	104.6	113.6	111.2	97.7	82.4	65.9	59.4	64.1	67.1	74.2	10
- 0.33	+ 0.25	+ 0.84	+ 1.79	+ 1.82	+ 0.96	- 0.05	- 1.16	- 1.46	- 0.86	- 0.39	+ 0.40	
79.9	100.0	87.8	116.3	97.0	70.6	36.0	35.3	35.1	46.3	33.8	36.0	11
+ 0.79	+ 1.46	+ 0.99	+ 1.96	+ 1.23	+ 0.25	- 1.01	- 1.08	- 1.13	- 0.77	- 1.26	- 1.22	
89.7	100.0	102.9	115.3	112.6	94.1	70.2	55.3	50.2	59.6	60.8	66.8	12
- 0.07	+ 0.68	+ 0.98	+ 1.86	+ 1.82	+ 0.84	- 0.46	- 1.23	- 1.40	- 0.71	- 0.51	- 0.02	
97.1	100.0	98.0	95.1	91.5	81.3	61.8	49.4	42.3	45.2	44.0	45.1	13
+ 0.16	+ 0.98	+ 1.29	+ 1.49	+ 1.62	+ 1.05	- 0.51	- 1.32	- 1.56	- 0.74	- 0.35	+ 0.28	
94.3	100.0	105.3	111.9	112.3	103.3	88.2	70.3	58.3	60.1	62.6	70.6	14
- 0.24	+ 0.35	+ 0.89	+ 1.57	+ 1.76	+ 1.26	+ 0.30	- 0.87	- 1.59	- 1.29	- 0.94	- 0.18	
95.8	100.0	101.5	106.1	105.6	97.7	86.5	75.0	67.4	70.5	84.9	73.9	15
- 0.23	+ 0.50	+ 0.91	+ 1.70	+ 1.87	+ 1.18	+ 0.09	- 1.04	- 1.70	- 1.10	+ 0.84	- 0.22	

and Shipping

114.9	100.0	103.5	141.0	166.8	118.8	155.9	164.2	159.5	121.4	135.8	160.0	1
- 0.87	- 1.15	- 1.00	- 0.02	+ 0.67	- 0.41	+ 0.56	+ 0.83	+ 0.79	- 0.05	+ 0.37	+ 1.02	
108.2	100.0	139.0	142.7	91.5	116.7	139.5	163.7	176.3	178.0	171.7	195.7	2
+ 0.82	- 0.26	+ 1.71	+ 1.39	- 2.48	- 1.40	- 0.48	+ 0.53	+ 0.79	+ 0.35	- 0.62	+ 0.38	
101.4	100.0	129.2	157.4	92.4	103.9	79.4	109.2	113.5	108.8	128.8	135.0	3
+ 0.92	+ 0.57	+ 2.12	+ 2.36	- 0.62	- 0.42	- 0.82	- 0.42	- 0.42	- 0.35	+ 0.52	+ 0.65	
95.2	100.0	90.8	111.6	126.3	103.8	98.0	88.7	94.3	210.4	229.9	251.2	4
+ 0.36	+ 0.32	- 0.78	- 2.70	+ 0.69	- 0.47	- 0.94	- 1.55	- 1.56	+ 2.93	+ 3.49	+ 4.12	

Indexes and Cycles of Economic Time Series showing (a) Trend Point of 1921, (b) The
Volume of Business and (d) The Standard Deviation

Table 11.

NOTE: Employment first collected 1921

No.	Classification	(a. c.) (b. d.) ¹		Index Cycle	1921	1922	1923	1924
		a.	b.		c.	d.		
1	Employment - All Industries	a. 95.8	b. + 0.40	Index	88.9	89.0	95.8	93.4
		c. .943	d. 9.46	Cycle	- 0.73	- 0.76	- 0.08	- 0.38
2	Manufacturing	a. 95.4	b. + 0.18		87.8	88.3	96.6	92.4
		c. .973	d. 9.54		- 0.80	- 0.77	+ 0.08	- 0.38
3	Leather and Products	a. 98.1	b. - 0.12		95.7	103.9	102.3	98.0
		c. .253	d. 6.16		- 0.39	+ 0.96	+ 0.71	+ 0.05
4	Lumber and Products	a. 102.9	b. - 2.28		85.0	92.7	101.2	94.3
		c. .983	d. 12.08		- 1.48	- 0.65	+ 0.23	- 0.15
5	Pulp and Paper	a. 91.8	b. - 0.22		78.2	79.8	90.5	88.0
		c. .967	d. 11.79		1.15	- 1.00	- 0.08	- 0.27
6	Printing and Publishing	a. 96.3	b. + 0.88		92.9	94.6	96.8	98.4
		c. .713	d. 6.16		- 0.55	- 0.42	- 0.21	- 0.01
7	Rubber Products	a. 92.5	b. + 0.70		75.8	82.5	84.5	79.9
		c. .930	d. 17.52		- 0.95	- 0.61	- 0.54	- 0.84
8	Textile Products	a. 88.8	b. + 1.46		86.5	84.5	95.6	90.4
		c. .826	d. 5.29		0.43	- 1.10	+ 0.74	- 0.53
9	Iron and Steel Products	a. 100.5	b. - 1.22		92.6	83.1	100.5	91.7
		c. .943	d. 15.20		- 0.52	- 1.06	+ 0.16	- 0.34
10	Automobiles and Parts	a. 86.2	b. + 1.64		83.0	74.0	90.1	84.2
		c. .874	d. 24.80		- 0.13	- 0.56	+ 0.02	- 0.28
11	Non-Ferrous Metal Products	a. 81.5	b. + 2.74		71.2	71.4	88.2	88.3
		c. .935	d. 16.06		- 0.64	- 0.80	+ 0.07	- 0.09
12	Logging	a. 101.4	b. + 0.16		103.0	85.2	114.2	116.7
		c. 1.582	d. 25.59		+ 0.06	- 0.64	+ 0.49	+ 0.58
13	Mining	a. 98.6	b. + 1.38		98.0	99.5	106.2	105.3
		c. .693	d. 8.54		- 0.07	- 0.06	+ 0.57	+ 0.30
14	Metallic Ores	a. 54.5	b. 10.24		56.1	65.5	83.4	100.5
		c. .405	d. 19.08		+ 0.08	+ 0.04	+ 0.45	+ 0.80
15	Communications	a. 99.2	b. - 0.50		90.2	86.4	87.6	93.7
		c. .690	d. 12.53		- 0.72	- 0.98	- 0.85	- 0.32
16	Transportation	a. 104.2	b. - 1.26		94.2	97.9	100.3	99.1
		c. .904	d. 7.48		- 1.34	0.57	- 0.19	- 0.17
17	Steam Railways	a. 107.3	b. - 2.10		97.2	96.0	101.7	99.9
		c. .908	d. 8.66		- 1.17	- 1.06	- 0.16	- 0.13
18	Construction and Maintenance	a. 86.6	b. + 1.52		71.1	76.7	80.9	80.3
		c. .721	d. 19.00		- 0.82	- 0.60	- 0.46	- 0.57
19	Building	a. 87.5	b. - 1.00		62.1	60.0	66.4	71.2
		c. .823	d. 29.66		- 0.86	- 0.89	- 0.64	- 0.45
20	Highway	a. 103.3	b. + 5.16		113.1	137.8	120.3	74.4
		c. .008	d. 30.90		+ 0.32	+ 0.95	+ 0.22	- 1.44
21	Railway	a. 102.7	b. - 1.88		89.1	92.2	97.4	90.1
		c. .958	d. 13.49		- 1.01	0.64	- 0.11	- 0.51
22	Services	a. 87.9	b. + 2.70		83.6	81.9	87.9	93.8
		c. .748	d. 9.75		- 0.44	- 0.89	- 0.55	- 0.23

1/ See Heading above for definition of a, b, c and d.

2/ In many cases do not exactly equal 100.

Annual Increment, (c) The Coefficient of Correlation with the index of the Phys. Ind.
from the Trend based on 1921 to 1936

Employment

1925	1926/2	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	No.
93.6	99.6	101.6	111.6	119.0	112.1	102.5	87.9	82.1	96.6	99.1	108.7	1
- 0.40	+ 0.19	+ 0.68	+ 1.37	+ 2.11	-	+ 0.79	1.14	- 1.32	0.52	- 0.21	+ 0.20	2
93.0	99.6	103.4	110.1	117.1	109.0	95.3	84.4	80.9	90.2	97.1	103.4	3
- 0.34	+ 0.35	+ 0.72	+ 1.40	+ 2.12	+ 1.25	- 0.20	- 1.36	- 1.75	- 0.80	+ 0.09	+ 0.56	4
93.6	99.2	103.1	100.7	93.1	87.8	88.2	88.4	90.5	95.8	104.6	108.3	5
- 0.65	+ 0.28	+ 0.93	+ 0.55	- 0.65	- 1.49	- 1.41	- 1.36	- 1.01	- 0.11	+ 1.33	+ 1.95	6
96.4	100.0	98.9	102.8	106.2	93.3	74.1	58.5	55.3	66.0	71.3	76.9	7
+ 0.22	+ 0.70	+ 0.80	+ 1.31	+ 1.78	+ 0.90	- 0.50	- 1.60	- 1.68	- 0.60	+ 0.02	+ 0.68	8
88.3	99.3	106.2	110.7	107.7	104.3	85.1	73.4	72.4	81.7	85.1	91.8	9
- 0.22	+ 0.73	+ 1.33	+ 1.73	+ 1.49	+ 1.23	- 0.38	- 1.36	- 1.42	- 0.62	- 0.31	+ 0.28	10
90.9	99.7	104.2	109.6	116.1	116.1	110.7	104.2	99.4	101.7	104.6	106.8	11
- 1.44	- 0.02	+ 0.42	+ 1.15	+ 2.06	+ 1.93	+ 0.91	- 0.29	- 1.22	- 0.99	- 0.64	- 0.44	12
96.9	100.4	112.8	128.7	139.5	117.4	98.7	85.2	79.9	92.0	92.3	97.8	13
+ 0.09	+ 0.25	+ 0.92	+ 1.79	+ 2.36	+ 1.06	- 0.05	- 0.86	- 1.20	- 0.55	- 0.57	- 0.30	14
94.7	99.7	104.1	105.1	107.2	101.2	97.6	97.0	96.1	107.1	111.6	117.7	15
0.0	+ 0.68	+ 1.23	+ 1.15	+ 1.27	- 0.15	- 1.10	- 1.49	- 1.93	- 0.13	+ 0.43	+ 1.32	16
88.5	99.4	101.6	112.6	125.2	108.1	85.9	67.3	61.1	71.5	82.7	89.2	17
- 0.47	+ 0.33	+ 0.56	+ 1.36	+ 2.27	+ 1.22	- 0.16	- 1.30	- 1.62	- 0.86	- 0.05	+ 0.46	18
80.5	98.9	95.1	140.8	154.2	116.6	77.3	67.3	68.7	90.6	127.6	127.6	19
- 0.50	+ 0.18	- 0.04	+ 1.74	+ 2.21	+ 0.63	- 1.02	- 1.49	- 1.50	- 0.69	+ 0.74	+ 0.68	20
83.9	99.1	110.1	119.7	132.8	129.3	111.4	84.9	84.1	106.4	119.6	133.1	21
- 0.54	+ 0.24	+ 0.75	+ 1.18	+ 1.82	+ 1.44	+ 0.16	- 1.67	- 1.89	- 0.67	- 0.02	+ 0.65	22
105.4	99.5	109.3	114.5	125.8	108.0	60.1	42.6	66.5	124.7	126.9	138.7	23
+ 0.13	- 0.10	+ 0.27	+ 0.47	+ 0.90	+ 0.20	- 1.68	- 2.36	- 1.44	+ 0.83	+ 0.91	+ 1.36	24
99.8	99.7	107.0	114.4	120.1	117.8	107.7	99.2	97.5	110.8	123.3	136.5	25
- 0.50	- 0.68	+ 0.01	+ 0.73	+ 1.23	+ 0.80	- 0.55	- 1.71	- 2.06	- 0.67	+ 0.63	+ 2.01	26
102.1	99.4	111.6	127.0	139.2	145.6	138.7	133.1	143.8	179.4	218.8	256.0	27
+ 0.35	- 0.33	- 0.22	+ 0.05	+ 0.15	- 0.05	- 0.95	- 1.78	- 1.76	- 0.43	+ 1.10	+ 2.51	28
95.5	99.6	103.8	108.2	120.6	119.8	104.7	93.5	83.9	79.1	79.8	81.0	29
- 0.14	+ 0.23	+ 0.61	+ 1.00	+ 2.03	+ 2.00	+ 0.84	- 0.02	- 0.74	- 1.09	- 0.99	- 0.85	30
96.6	99.7	102.5	105.9	109.7	104.6	95.8	84.7	79.0	80.3	81.2	84.1	31
- 0.34	+ 0.24	+ 0.79	+ 1.40	+ 2.09	+ 1.58	+ 0.56	- 0.75	- 1.35	- 1.00	- 0.71	- 0.16	32
96.8	99.9	102.5	106.3	107.1	100.7	91.3	77.4	69.7	72.2	72.1	74.7	33
+ 0.24	+ 0.36	+ 0.90	+ 1.58	+ 1.92	+ 1.42	+ 0.58	- 0.79	- 1.43	- 0.90	- 0.67	- 0.13	34
84.9	99.2	109.0	118.8	129.7	129.8	131.4	86.0	74.6	109.3	97.8	88.2	35
- 0.41	+ 0.26	+ 0.70	+ 1.14	+ 1.63	+ 1.55	+ 1.56	- 0.71	- 1.59	+ 0.16	- 0.53	+ 1.12	36
75.8	98.5	108.7	112.0	135.3	134.3	104.3	54.1	38.5	47.8	55.4	55.4	37
- 0.26	+ 0.54	+ 0.92	+ 1.06	+ 1.88	+ 1.88	+ 0.90	- 0.76	- 1.25	- 0.90	- 0.61	- 0.58	38
101.1	100.5	129.3	137.1	150.1	132.6	216.4	167.9	152.8	221.7	175.5	175.5	39
- 0.74	- 0.93	- 0.16	- 0.07	+ 0.18	+ 1.09	+ 1.99	- 0.52	- 1.07	+ 1.65	- 0.01	- 1.46	40
88.1	99.4	101.6	116.7	114.4	99.9	87.3	66.8	41.2	47.9	68.8	71.6	41
- 0.53	+ 0.45	+ 0.76	+ 2.02	+ 1.99	+ 1.05	+ 0.14	- 1.13	- 1.39	- 0.76	- 0.56	+ 0.27	42
95.4	99.5	106.2	118.1	130.3	131.6	124.7	113.6	106.1	115.1	118.2	124.5	43
- 0.34	- 0.19	+ 0.22	+ 1.16	+ 2.13	+ 1.99	+ 1.01	- 0.41	- 1.39	- 0.81	- 0.77	- 0.40	44

Indexex and Cycles of Economic Time Series showing (a) Trend Point of 1919, (b) The
Volume of Business and (d) The Standard Deviation

Table 12. Labour Factors

No.	Classification	(a. (c.)	b. ¹) (d.)	1919	1920	1921	1922	1923	1924
	Employment Office Operations -								
1	Applications	a. 88.25 c. .352	b. 2.76 d. 11.08	Index 74.4 Cycle -1.25	106.1 + 1.36	100.2 + 0.58	100.9 + 0.39	108.4 + 0.82	95.6 - 0.58
2	Vacancies	a.107.05 c. .230	b. -1.21 c. 10.07	90.6 - 1.63	124.0 + 1.80	94.5 - 1.01	102.8 - 0.06	118.4 + 1.61	90.2 - 1.07
3	Placements	a. 95.64 c. .422	b. 0.23 d. 11.22	74.6 - 1.88	108.7 + 1.14	86.7 - 0.84	95.9 - 0.04	112.8 + 1.45	89.3 - 0.66
	Strikes and Lockouts -								
4	Disputes in existence ..	a.237.71 c. .404	b. -8.10 d.107.38	436.4 + 1.85	418.2 + 1.76	218.2 - 0.003	135.1 - 0.73	111.7 - 0.87	90.9 - 0.99
5	Number of Employees ...	a.262.94 c. .346	b. -14.17 d.120.49	624.8 + 3.00	253.1 + 0.04	118.6 - 0.96	183.7 - 0.30	143.7 - 0.52	144.0 - 0.39
6	Time Loss in Working Days	a.623.94 c. .404	b. -45.03 d.224.54	1275.7 + 2.90	299.9 - 1.24	393.4 - 0.63	573.4 + 0.38	252.0 - 0.85	485.8 + 0.39
	Immigration								
7	Total	a.100.64 c. .897	b. -3.91 d. 33.73	79.2 - 0.64	102.1 + 0.16	67.5 - 0.75	47.2 - 1.24	98.3 + 0.39	91.3 + 0.30
8	From the United Kingdom	a.140.81 c. .803	b. -7.79 d. 34.20	117.3 - 0.69	155.3 + 0.65	89.7 - 1.04	63.5 - 1.58	143.6 + 0.99	118.0 + 0.47
9	From the United States	a.152.04 c. .531	b. -6.35 d. 37.13	201.2 + 1.32	191.9 + 1.24	114.1 - 0.68	83.7 - 1.33	79.8 - 1.26	76.6 - 1.18
10	From Other Countries ..	a. 59.32 c. .864	b. -0.87 d. 41.22	12.6 - 1.03	34.5 - 0.58	36.3 - 0.52	23.7 - 0.80	70.8 + 0.36	76.3 + 0.52

Table 13. Wholesale

	Component Material -								
1	Totals	a.128.91 c. .294	b. -4.27 d. 11.03	134.0 + 0.46	144.0 + 2.75	110.0 - 0.94	97.3 - 1.70	98.0 - 1.25	99.4 - 0.74
2	Vegetable Products	a.127.92 c. .311	b. -4.85 d. 17.08	136.1 + 0.48	167.0 + 2.57	103.5 - 0.86	86.2 - 1.59	83.7 - 1.45	89.2 - 0.85
3	Animal Products	a.128.49 c. .632	b. -4.16 d. 13.89	140.8 + 0.89	145.1 + 1.50	109.6 - 0.76	96.0 - 1.44	95.0 - 1.21	91.8 - 1.14
4	Textiles	a.143.15 c. .425	b. -5.48 d. 16.13	163.8 + 1.28	176.5 + 2.41	96.0 - 2.24	101.7 - 1.55	116.9 - 0.27	117.9 + 0.13
5	Wood and Paper	a.131.61 c. .155	b. -4.41 d. 10.12	109.6 - 2.17	154.4 + 2.69	129.4 + 0.65	106.3 - 1.19	113.0 - 0.10	105.9 - 0.36
6	Iron and its Products ..	a.136.33 c. .311	b. -4.08 d. 11.56	139.1 + 0.24	168.4 + 3.13	128.0 - 0.01	104.6 - 1.69	115.8 - 0.36	111.0 - 0.43
7	Non-ferrous metals	a.122.96 c. .526	b. -4.12 d. 10.24	133.5 + 1.07	135.5 + 1.63	97.0 - 1.73	97.3 - 1.50	95.3 - 1.09	94.8 - 0.74
8	Non-metallic Minerals ..	a.110.09 c. .010	b. -1.75 d. 5.15	95.6 - 3.20	112.2 + 0.75	116.6 + 1.94	107.0 + 0.41	104.4 + 0.24	104.1 + 0.52
9	Chemicals	a.119.90 c. .0004	b. -2.63 d. 6.73	117.5 - 0.36	141.5 + 3.60	117.0 + 0.35	105.4 - 0.98	104.4 - 0.74	102.5 - 0.63

Annual Increments (c) The Coefficient of Correlation with the index of the Physical
from the Trend based on 1919 to 1934.

and Immigration

1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	%.
102.5	100.0	101.9	109.9	101.3	112.8	152.0	110.0	170.1	111.5	120.2	125.1	1
- 0.21	- 0.68	- 0.76	- 0.29	- 1.31	- 0.53	+ 2.76	- 0.77	- 0.25	+ 0.40	- 1.11	- 0.91	
97.8	100.0	99.3	110.8	93.7	84.5	106.4	90.1	88.4	91.6	81.6	77.8	2
- 0.20	+ 0.14	+ 0.19	+ 0.46	- 0.11	- 0.92	+ 1.38	- 1.12	- 0.91	- 0.17	- 0.61	- 0.86	
100.7	100.0	101.1	114.7	97.1	89.9	115.0	107.9	87.9	99.0	85.5	80.8	3
+ 0.33	+ 0.25	+ 0.33	+ 1.52	- 0.07	- 0.73	+ 1.48	- 1.15	1.16	0.001	- 1.22	- 1.66	
113.0	100.0	96.1	127.3	116.9	87.0	114.3	110.1	152.1	157.2	232.5	222.1	4
- 0.71	- 0.75	- 0.2	- 0.35	- 0.37	- 0.57	- 0.15	- 0.7	- 0.77	- 2.21	+ 1.15	+ 1.17	
121.5	100.0	93.6	73.8	54.3	57.8	45.1	111.1	202.5	212.2	154.1		5
- 0.47	- 0.52	- 0.46	- 0.51	- 0.56	- 0.41	- 0.40	+ 0.16	- 0.79	+ 1.97	+ 1.47	+ 1.10	
447.6	100.0	57.2	84.1	57.0	34.4	76.6	95.6	119.1	227.7	144.5	99.7	6
+ 0.42	- 0.93	- 0.92	- 0.60	- 0.52	- 0.42	- 0.03	+ 0.25	+ 0.56	+ 1.24	+ 1.07	+ 1.07	
62.4	100.0	116.8	122.7	121.3	77.1	20.2	15.1	10.6	9.2	8.3	8.6	7
- 0.44	+ 0.79	+ 1.41	+ 1.70	+ 1.77	+ 0.58	- 0.99	- 1.03	- 1.05	0.97	- 0.88	- 0.76	
72.4	100.0	108.4	114.4	136.8	65.0	17.8	6.8	4.7	4.4	4.3	4.9	8
- 0.63	+ 0.40	+ 0.87	+ 1.28	+ 2.16	+ 0.29	- 0.86	- 0.96	- 0.79	0.57	- 0.35	- 0.11	
84.6	100.0	113.7	112.9	152.1	122.4	72.6	65.5	40.6	29.6	25.3	23.3	9
- 0.79	- 0.20	+ 0.34	+ 1.29	+ 1.71	+ 1.03	- 0.09	- 1.07	- 0.61	- 0.75	- 0.68	- 0.56	
48.1	100.0	124.0	122.3	100.2	71.7	7.0	5.1	5.4	6.4	5.9	6.9	10
- 0.15	+ 1.13	+ 1.74	+ 1.72	+ 1.20	- 0.12	- 0.01	- 1.03	- 1.01	- 0.97	- 0.96	- 0.91	

Prices by Groups

102.6	100.0	97.7	96.4	95.6	86.6	72.1	66.7	67.1	72.1	74.6		1
- 0.06	+ 0.09	+ 0.27	+ 0.54	+ 0.85	+ 0.42	- 0.50	- 0.61	- 0.18	+ 0.61	+ 1.04	+ 1.68	
100.6	100.0	98.3	93.0	91.6	77.7	56.9	54.8	59.3	66.6	67.3	72.6	
+ 0.10	+ 0.35	+ 0.54	+ 0.53	+ 0.98	+ 0.18	- 0.15	- 0.59	- 0.04	+ 0.67	+ 0.99	+ 1.59	
100.3	100.0	101.9	108.1	109.0	99.1	73.9	19.1	59.4	66.9	70.3	71.7	2
- 0.23	+ 0.05	+ 0.48	+ 1.23	+ 1.59	+ 1.18	- 0.34	- 1.06	- 0.78	+ 0.06	+ 0.60	+ 1.00	
112.5	100.0	93.7	94.5	91.3	81.8	73.4	69.7	69.7	77.4	70.3	69.7	
+ 0.14	- 0.30	- 0.35	+ 0.04	+ 0.18	- 0.07	- 0.25	- 0.14	+ 0.20	+ 0.77	+ 0.92	+ 1.33	
101.6	100.0	98.5	98.7	93.9	88.7	79.1	69.1	62.8	65.2	64.6	65.3	
- 0.35	- 0.07	+ 0.21	+ 0.67	+ 0.63	+ 0.55	+ 0.04	- 0.51	- 0.70	+ 0.004	+ 0.35	+ 1.17	
104.5	100.0	96.2	93.2	93.7	91.1	87.4	86.2	85.4	87.0	79.9	84.0	3
+ 0.64	- 0.67	- 0.65	- 0.55	- 0.16	- 0.03	+ 0.003	+ 0.25	+ 0.54	+ 1.03	+ 0.77	+ 1.32	
103.9	100.0	91.5	92.0	99.2	80.7	64.6	19.1	64.3	64.3	69.1	70.1	
+ 0.55	+ 0.57	+ 0.15	+ 0.60	+ 1.70	+ 0.30	- 0.87	- 1.02	- 0.10	- 0.31	+ 1.18	1.18	
100.3	100.0	96.5	92.5	92.9	91.3	86.5	85.5	84.4	86.0	85.4		
+ 0.2	+ 0.39	+ 0.05	- 0.39	+ 0.02	+ 0.05	- 0.55	- 0.41	- 0.29	+ 0.36	+ 0.58	+ 0.92	
99.6	100.0	98.3	95.3	95.4	92.8	86.7	83.9	81.3	81.2	79.3	77.4	
0.67	- 0.22	- 0.08		+ 0.27	+ 0.27	- 0.24	- 0.27	- 0.26	+ 0.11	+ 0.21		

Indexes and Cycles of Economic Time Series showing (a) Trend Point of 1919, (b) The
 Volume of Business and (d) The Standard Deviation

Table 13. Wholesale Prices

No.	Classification	(a) (c.)	(b.) (d.)	1919	1920	1921	1922	1923	1924
<u>Purpose</u>									
10	Consumers' Goods	a 118.55 c. .344	b. .3.19 d. 8.94	Index Cycle	118.7 + 0.02	140.0 + 2.76	108.0 - 0.47	95.1 - 1.55	93.7 - 1.35
11	Foods, Beverages and Tobacco	a.125.44 c. .468	b. .4.13 d. 13.42		128.2 + 0.21	151.0 + 2.21	105.4 - 0.88	90.2 - 1.70	91.2 - 1.32
12	Producers' Goods	a.133.86 c. .292	b. .4.91 d. 12.38		139.0 + 0.42	163.1 + 2.76	112.8 - 0.91	99.1 - 1.62	97.8 - 1.33
13	Building and Construction Materials	a.126.68 c. .190	b. .3.43 d. 6.92		117.3 - 1.36	144.0 + 3.00	122.8 + 0.42	108.7 - 1.12	111.9 - 0.16
<u>Origin</u>									
14	Field Origin, Totals ...	a.131.14 c. .254	b. .5.15 d. 16.11		139.3 + 0.51	169.5 + 2.70	103.4 - 1.08	89.1 - 1.65	89.3 - 1.32
15	Animal Origin	a.128.94 c. .558	b. .4.25 d. 13.21		143.0 + 1.06	146.6 + 1.66	109.6 - 0.82	95.5 - 1.57	95.6 - 1.24
16	Canadian Farm Products ..	a.130.30 c. .478	b. .5.17 d. 18.28		145.5 + 0.83	161.6 + 2.00	102.8 - 0.94	86.7 - 1.54	79.8 - 1.63
17	Marine Origin	a.108.68 c. .845	b. .2.34 d. 10.87		114.3 + 0.52	111.7 + 0.49	91.6 - 1.14	91.9 - 0.90	83.6 - 1.45
18	Forest Origin	a.131.58 c. .285	b. .4.41 d. 10.09		109.6 - 2.18	154.4 + 2.70	129.4 + 0.66	106.3 - 1.19	113.0 - 0.09
19	Mineral Origin	a.119.74 c. .107	b. .2.86 d. 4.82		112.4 - 1.52	131.4 + 3.01	117.6 + 0.74	105.8 - 1.11	105.8 - 0.52
<u>Commodity Groups</u>									
20	Fruits	a.144.54 c. .452	b. .4.07 d. 10.66		178.7 - 0.95	156.1 + 1.47	126.2 + 0.04	135.2 + 0.27	117.1 - 1.05
21	Grains	a.139.17 c. .351	b. .6.60 d. 20.85		160.2 + 1.01	171.7 + 1.88	108.8 - 0.82	84.7 - 1.66	76.4 - 1.74
22	Flour and Milled Products	a.126.16 c. .324	b. .4.60 d. 16.59		132.5 + 0.38	160.1 + 2.32	109.2 - 0.47	86.8 - 1.54	79.2 - 1.72
23	Furs	a.107.32 c. .820	b. .2.13 d. 29.58		122.4 + 0.51	122.9 + 0.60	72.6 - 1.03	84.0 - 0.57	79.1 - 0.67
24	Boots and Shoes ...	a.141.04 c. .063	b. .4.08 d. 15.23		163.1 + 1.45	175.2 + 2.51	126.0 - 0.45	111.5 - 1.14	108.1 - 1.09
25	Live Stock	a.141.00 c. .525	b. .4.95 d. 22.19		165.3 + 1.10	177.2 + 1.85	108.0 - 1.04	99.0 - 1.22	94.4 - 1.21
26	Meats and Poultry	a.120.19 c. .678	b. .3.65 d. 16.01		132.5 + 0.77	137.0 + 1.28	100.9 - 0.75	92.9 - 1.02	86.8 - 1.17
27	Milk and its Products ..	a.131.56 c. .658	b. .4.48 d. 11.73		137.0 + 0.46	144.3 + 1.47	119.3 - 0.28	96.7 - 1.83	103.1 - 0.90
28	Eggs	a.136.06 c. .599	b. .4.95 d. 14.13		142.8 + 0.48	154.0 + 1.62	115.4 - 0.76	96.7 - 1.73	94.0 - 1.57
29	Wool, raw	a.122.07 c. .410	b. .4.86 d. 32.12		185.9 + 1.99	84.6 - 1.02	36.9 - 2.35	78.2 - 0.91	108.7 + 0.19
30	Newspaper	a.138.23 c. .123	b. .5.29 d. 12.89		104.8 - 2.59	151.9 + 1.47	155.1 + 2.13	108.1 - 1.11	113.9 - 0.25
31	Lumber and Timber	a.125.33 c. .513	b. .3.50 d. 8.20		110.4 - 1.82	139.1 + 2.11	121.3 + 0.36	108.0 - 0.83	112.1 + 0.09
32	Pulp	a.159.51 c. .739	b. .6.86 d. 38.53		119.1 - 1.05	287.7 + 3.51	139.5 - 0.16	91.6 - 1.23	120.7 - 0.30

Annual Increment (1) The coefficient of correlation in the index of the physical
from the Trend based on 1919 to 1934.

by Groups - Continued

1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937
97.2	100.0	95.7	95.6	94.7	89.3	76.2	71.3	71.1	74.2	73.6	74.7	10
- 0.25	+ 0.42	+ 0.30	+ 0.64	+ 0.90	+ 0.65	- 0.46	- 0.65	- 0.31	+ 0.39	+ 0.68	+ 1.16	
97.7	100.0	99.4	99.6	100.0	93.1	70.4	61.4	63.8	69.6	70.3	73.4	11
0.22	+ 0.26	+ 0.52	+ 0.84	+ 1.18	+ 0.99	- 0.41	- 0.77	- 0.28	+ 0.46	+ 0.82	+ 1.35	
104.9	100.0	98.5	96.7	96.3	82.8	67.9	63.1	63.1	67.9	69.6	72.4	12
+ 0.04	+ 0.04	+ 0.32	+ 0.57	+ 0.93	+ 0.24	- 0.57	- 0.56	- 0.16	+ 0.62	+ 1.16	+ 1.78	
102.9	100.0	96.1	97.4	99.0	90.8	81.9	77.2	78.3	82.7	81.2	85.4	13
- 0.48	- 0.41	- 0.48	+ 0.20	+ 0.93	+ 0.24	- 0.56	- 0.74	- 0.09	+ 1.04	+ 1.31	+ 2.41	
102.3	100.0	97.9	92.2	90.1	76.3	57.7	55.1	59.3	64.9	65.4	69.2	14
+ 0.13	+ 0.30	+ 0.49	+ 0.46	+ 0.65	+ 0.11	- 0.72	- 0.56	+ 0.02	+ 0.68	+ 1.03	+ 1.59	
100.6	100.0	100.5	105.1	105.5	95.6	73.9	60.6	61.0	68.0	70.6	72.4	15
- 0.21	+ 0.06	+ 0.42	+ 1.09	+ 1.44	+ 1.02	- 0.31	- 0.99	- 0.64	+ 0.21	+ 0.73	+ 1.19	
100.4	100.0	102.1	100.7	100.8	82.3	56.3	48.4	51.0	59.0	63.4	70.1	16
+ 0.06	+ 0.32	+ 0.72	+ 0.93	+ 1.21	+ 0.49	- 0.65	- 0.80	- 0.38	+ 0.34	+ 0.87	+ 1.51	
98.3	100.0	100.2	100.6	105.3	95.3	75.6	63.8	62.9	70.4	69.7	69.2	17
- 0.34	+ 0.71	+ 0.94	+ 1.19	+ 1.84	+ 1.14	- 0.46	- 1.33	- 1.20	- 0.29	- 0.14	+ 0.03	
101.6	100.0	98.3	98.6	93.7	88.5	79.0	69.2	63.0	65.6	65.9	68.5	18
- 0.35	- 0.07	+ 0.20	+ 0.67	+ 0.62	+ 0.54	+ 0.03	- 0.50	- 0.68	- 0.02	+ 0.48	+ 1.18	
101.6	100.0	94.6	91.5	92.8	88.4	81.9	81.4	80.6	82.2	82.5	82.8	19
- 0.20	+ 0.06	- 0.47	- 0.52	+ 0.34	+ 0.02	- 0.73	- 0.24	+ 0.19	+ 1.11	+ 1.77	+ 2.42	
116.6	100.0	121.6	131.7	109.8	109.5	93.9	90.2	76.7	81.0	77.5	78.9	20
- 0.33	- 1.51	+ 0.90	+ 2.23	+ 0.56	+ 0.91	- 0.17	- 0.13	- 1.02	- 0.23	- 0.18	+ 0.33	
110.3	100.0	100.9	93.8	94.8	66.0	40.6	39.3	44.3	54.8	58.7	66.3	21
+ 0.51	+ 0.34	+ 0.70	+ 0.68	+ 1.04	- 0.03	- 0.93	- 0.67	- 0.12	+ 0.70	+ 1.21	+ 1.89	
106.9	100.0	97.6	95.1	94.6	81.4	55.4	56.0	58.3	68.3	69.8	75.5	22
+ 0.51	+ 0.36	+ 0.50	+ 0.62	+ 0.87	+ 0.35	- 0.94	- 0.62	- 0.21	+ 0.67	+ 1.04	+ 1.66	
69.1	100.0	127.6	137.0	143.6	113.8	66.8	51.3	55.7	53.3	73.2	59.7	23
- 0.86	+ 0.26	+ 1.26	+ 1.65	+ 1.95	+ 1.01	- 0.51	- 0.96	- 0.74	- 0.75	- 0.72	+ 0.39	
98.7	100.0	100.8	113.5	106.7	99.2	95.6	90.6	89.4	87.2	75.8	88.2	24
- 1.17	- 0.82	- 0.50	+ 0.60	+ 0.42	+ 0.20	+ 0.23	+ 0.17	+ 0.36	+ 0.48	+ 0.65	+ 1.08	
101.9	100.0	102.5	123.0	124.3	111.4	76.0	61.2	55.3	69.3	79.4	72.5	25
- 0.42	- 0.29	+ 0.05	+ 1.20	+ 1.48	+ 1.12	- 0.25	- 0.70	- 0.74	+ 0.11	+ 0.79	+ 0.71	
94.3	100.0	95.3	104.9	110.2	102.6	72.3	53.4	52.5	67.7	70.7	70.0	26
- 0.22	+ 0.33	+ 0.27	+ 1.10	+ 1.66	+ 1.47	- 0.26	- 1.21	- 1.04	+ 0.14	+ 0.56	+ 0.74	
101.1	100.0	103.6	106.4	106.9	94.6	73.5	59.2	60.2	64.1	68.2	71.0	27
- 0.31	- 0.02	+ 0.67	+ 1.29	+ 1.72	+ 1.05	- 0.37	- 1.20	- 0.74	- 0.02	+ 0.71	+ 1.33	
112.6	100.0	108.6	104.0	104.9	100.2	70.1	60.6	53.2	60.5	61.7	66.6	28
+ 0.44	- 0.10	+ 0.86	+ 0.88	+ 1.30	+ 1.32	- 0.46	- 0.79	- 0.96	- 0.09	+ 0.34	+ 1.04	
128.9	100.0	84.4	110.7	91.4	56.1	44.1	31.7	47.0	61.3	50.4	68.1	29
+ 1.12	+ 0.37	- 0.04	- 1.61	+ 0.56	- 0.39	- 0.61	- 0.85	- 0.22	+ 0.28	+ 0.19	+ 0.89	
106.5	100.0	100.1	98.1	86.5	85.3	77.7	68.2	77.2	74.0	74.0	70.4	
- 0.01	- 0.09	+ 0.33	+ 0.58	+ 0.09	+ 0.41	+ 0.23	- 0.10	- 0.69	- 0.38	+ 0.03	+ 0.55	
100.5	100.0	97.5	102.3	103.5	90.1	77.4	68.8	70.8	78.5	77.6	86.3	31
- 0.45	- 0.10	+ 0.02	+ 1.03	+ 1.61	+ 0.40	- 0.72	- 1.35	- 0.67	+ 0.70	+ 1.00	+ 2.50	
97.9	100.0	96.0	92.6	93.6	92.9	84.0	71.3	67.3	71.2	67.0	68.3	32
- 0.52	- 0.30	- 0.22	- 0.13	+ 0.07	+ 0.22	+ 0.18	+ 0.03	+ 0.10	+ 0.38	+ 0.45	+ 0.66	

Indexes and Cycles of Economic Time Series showing (a) Trend Point of 1919, (b) The
 Volume of Business and (d) The Standard Deviation

Table 13. Wholesale

No.	Classification	(a. (c.)		Index Cycle	1919	1920	1921	1922	1923	1924
		b. (d.)	1							
33	Pig Iron and Steel	a.158.45	b.- 6.21	Index	159.2	218.9	138.4	120.7	133.5	109.3
	Billets	c.- .325	d. 20.35	Cycle	+ 0.04	+ 3.28	- 0.37	- 0.94	- 0.01	- 0.89
34	Aluminium	a.117.44	b.- 2.46		134.6	178.3	108.4	81.6	96.3	103.0
		c.- 3.17	d. 11.37		+ 1.51	+ 2.05	- 0.36	- 2.50	- 0.99	- 0.19
35	Brass, Copper and Products	a.127.58	b.- 4.28		134.3	137.8	100.2	97.9	105.3	95.7
		c. .795	d. 15.78		+ 0.43	+ 0.92	- 1.19	- 1.07	- 0.33	- 0.66
36	Lead and its Products	a.100.39	b.- 3.24		79.7	106.8	70.8	75.9	86.9	97.6
		c. .596	d. 14.83		- 1.40	+ 0.65	- 1.56	- 1.00	- 0.04	+ 0.90
37	Silver	a.146.81	b.- 6.65		178.6	168.8	102.1	109.5	105.1	107.4
		c. .042	d. 17.66		+ 1.80	+ 1.62	- 1.78	- 0.98	- 0.86	- 0.35
38	Zinc and its Products	a.107.61	b.- 3.97		96.5	114.1	77.9	82.7	93.9	89.7
		c. .588	d. 12.28		- 0.90	+ 0.85	- 1.77	- 1.06	+ 0.18	+ 0.16
39	Coal	a.102.41	b.- 0.71		83.6	100.2	111.4	101.9	103.5	103.3
		c. .168	d. 5.98		- 3.15	- 0.25	+ 1.74	+ 0.27	+ 0.66	+ 0.74
40	Coke	a.106.86	b.- 0.72		90.4	101.5	113.5	113.5	113.5	111.8
		c. .161	d. 6.58		- 2.50	- 0.71	+ 1.23	+ 1.34	+ 1.45	+ 1.30
41	Petroleum and Products	a.122.31	b.- 3.64		113.6	139.9	123.4	114.5	95.4	97.3
		c. -.210	d. 8.07		- 1.08	+ 2.63	+ 1.04	+ 0.79	- 1.53	- 0.84
42	Cement	a.160.08	b.- 4.92		148.6	171.5	174.0	158.4	142.8	137.3
		c. -.742	d. 15.13		- 0.76	+ 1.08	+ 1.57	+ 0.86	+ 0.16	+ 0.12

Table 14. Prices of

Wholesale Prices of Important Commodities -										
1	Flour, First Patent	a.124.94	b.- 4.70		129.5	156.9	110.2	86.8	77.9	83.9
	2-98's Jute	c. .274	d. 15.37		+ 0.30	+ 2.59	- 0.35	- 1.56	- 1.84	- 1.14
2	Sugar, raw 96° Centri- fugal, N.Y.	a.349.89	b.-24.46		312.1	605.3	228.2	199.0	275.3	222.2
		c. -.256	d. 83.30		- 0.45	+ 3.36	- 0.87	- 0.93	+ 0.28	- 0.06
3	Sugar, granulated, Mt'l	a.181.71	b.- 8.16		166.3	285.8	149.6	112.0	160.9	139.7
		c. -.278	d. 34.81		- 0.44	+ 3.22	- 0.45	- 1.30	+ 0.34	- 0.03
4	Rubber, ribbed, smoked, sheets, N.Y.	a. 86.47	b.- 4.41		99.8	71.1	34.4	35.9	60.7	53.9
		c. -.315	d. 31.15		+ 0.43	- 0.35	- 1.39	- 1.20	- 0.26	- 0.34
5	Cattle, Steers, good	a.136.63	b.- 3.80		157.6	173.8	107.5	97.9	92.8	91.9
	1,000-1,200 lbs.	c. .581	d. 24.27		+ 0.86	+ 1.69	- 0.89	- 1.13	- 1.18	- 1.06
6	Hogs, Bacon, Toronto	a.117.08	b.- 4.48		140.1	135.4	83.6	95.1	73.3	68.3
		c. -.476	d. 18.19		+ 1.27	+ 1.25	- 1.35	- 0.47	- 1.42	- 1.45
7	Calves, good veal,	a.116.74	b.- 3.29		129.7	144.1	91.6	79.6	79.3	78.5
	Toronto	c. .725	d. 22.62		+ 0.57	+ 1.75	- 0.82	- 1.21	- 1.07	- 0.96
8	Lambs, good handy weight, Toronto	a.125.57	b.- 4.35		138.9	125.1	86.4	98.7	102.5	105.8
		c. .771	d. 13.40		+ 0.99	+ 0.29	- 2.27	- 1.03	- 0.42	+ 0.15
9	Butter, creamery, finest, Montreal	a.131.94	b.- 4.75		146.4	149.5	108.5	92.3	98.5	95.4
		c. .592	d. 13.89		+ 1.04	+ 1.61	- 1.00	- 1.83	- 1.04	- 0.92
10	Cheese, Canadian, old, large, Montreal	a.128.29	b.- 4.01		125.0	125.0	125.0	108.2	118.4	97.7
		c. .579	d. 10.89		- 0.30	+ 0.07	+ 0.13	- 0.74	+ 0.56	- 0.97
11	Eggs, Grade "A", Montreal	a.133.38	b.- 4.48		137.6	149.9	115.1	101.1	100.0	103.4
		c. .609	d. 11.49		+ 0.37	+ 1.83	- 0.81	- 1.64	- 1.35	- 0.66

Annual Increments, (c) The Coefficient of Correlation with the Index of the Phys. cap. from the Trend based on 1919 to 1934.

Prices by Groups - Concluded.

1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937
104.1	100.0	93.4	90.8	93.5	88.6	86.9	86.9	85.0	82.8	83.0	83.4	33
- 0.84	+ 0.74	- 0.76	- 0.58	- 0.14	- 0.08	+ 0.10	- 0.45	+ 0.56	+ 0.86	+ 1.17	+ 1.50	34
104.3	100.0	95.3	89.5	88.7	86.8	88.0	96.1	92.4	80.5	79.4	81.6	34
+ 0.14	- 0.02	- 0.22	- 0.51	- 0.36	- 0.31	+ 0.01	+ 0.94	+ 0.83	- 0.004	- 0.11	+ 0.53	35
101.1	100.0	94.0	104.5	121.3	96.3	66.1	51.2	58.3	57.6	59.9	68.4	35
- 0.05	+ 0.15	+ 0.04	+ 0.98	+ 2.69	+ 1.00	- 0.64	- 1.31	- 0.59	- 0.37	+ 0.05	+ 0.86	36
109.9	100.0	82.6	74.2	81.4	67.4	51.5	43.8	46.2	42.8	48.9	57.5	36
+ 1.95	+ 1.50	+ 0.55	+ 0.20	+ 0.90	+ 0.18	- 0.67	- 0.98	- 0.60	- 0.61	+ 0.02	+ 0.82	37
111.5	100.0	90.6	93.6	85.5	61.5	48.4	51.1	60.7	76.6	104.3	72.5	37
+ 0.26	- 0.01	- 0.17	+ 0.38	+ 0.29	- 0.69	- 1.05	- 0.52	+ 0.40	+ 1.67	+ 3.62	+ 2.19	38
102.5	100.0	87.4	80.9	77.8	57.7	45.0	42.2	50.9	46.1	45.3	47.1	38
+ 1.52	+ 1.64	+ 0.94	+ 0.73	+ 0.81	- 0.51	- 1.22	- 1.12	- 0.09	- 0.16	+ 0.10	+ 0.57	39
100.5	100.0	101.8	95.3	95.6	94.3	93.6	91.0	87.5	90.0	91.1	91.0	39
+ 0.39	+ 0.43	+ 0.85	- 0.12	+ 0.05	- 0.05	- 0.05	- 0.36	- 0.83	- 0.29	- 0.01	+ 0.1	40
100.8	100.0	95.2	95.6	98.6	100.8	100.8	99.8	94.2	93.4	93.1	94.5	40
- 0.26	- 0.28	- 0.90	- 0.73	- 0.16	+ 0.28	+ 0.39	+ 0.35	- 0.39	- 0.40	- 0.34	+ 0.02	41
91.2	100.0	90.3	85.9	86.0	84.0	73.0	74.6	74.8	76.3	74.8	73.3	41
- 1.15	+ 0.39	- 0.36	- 0.45	+ 0.01	+ 0.21	- 0.70	- 0.05	+ 0.43	+ 1.06	+ 1.33	+ 1.60	42
127.9	100.0	94.0	97.0	100.2	100.8	102.3	105.3	105.5	105.2	105.2	105.9	42
- 0.18	- 1.69	- 1.77	- 1.24	- 0.71	- 0.34	+ 0.08	+ 0.54	+ 0.95	+ 1.25	+ 1.58	+ 1.95	

Representative Commodity Groups

106.9	100.0	93.6	88.1	90.0	79.6	57.0	54.6	57.7	62.4	55.5	64.6	1
+ 0.66	+ 0.52	+ 0.41	+ 0.36	+ 0.78	+ 0.41	- 0.75	- 0.60	- 0.09	+ 0.52	+ 0.37	+ 1.27	2
156.0	100.0	116.3	96.5	78.8	59.7	54.6	42.2	51.4	65.5	74.5	76.7	2
- 0.57	- 0.94	- 0.46	- 0.40	- 0.32	- 0.25	- 0.02	+ 0.12	+ 0.53	+ 0.99	+ 1.29	+ 1.52	2
104.9	100.0	105.1	95.9	87.1	79.8	76.4	73.5	97.8	93.3	81.1	11.1	3
- 0.80	- 0.71	- 0.33	- 0.36	- 0.37	- 0.35	- 0.21	- 0.06	+ 0.87	+ 0.98	+ 0.15	+ 1.20	3
149.0	100.0	77.2	45.5	42.0	24.6	12.9	8.0	13.1	26.2	25.4	25.8	4
+ 2.86	+ 1.42	+ 0.83	- 0.04	- 0.01	- 0.43	- 0.66	- 0.68	- 0.37	+ 1.19	- 0.40	+ 1.17	4
98.8	100.0	111.8	142.9	135.9	119.9	85.8	75.2	63.2	75.1	81.4	71.6	5
- 0.62	- 0.41	+ 0.23	+ 1.67	+ 1.54	+ 1.03	- 0.22	- 0.50	- 0.83	- 0.19	- 0.17	+ 0.41	5
96.5	100.0	81.5	78.9	92.6	92.5	56.4	35.3	41.6	64.6	61.4	67.3	5
+ 0.35	+ 0.79	+ 0.01	+ 0.12	+ 1.12	+ 1.36	- 0.38	- 1.29	- 0.70	+ 0.81	- 1.11	- 1.24	5
82.3	100.0	103.1	120.0	129.1	102.7	70.0	54.4	52.7	55.9	70.8	72.7	6
- 0.65	+ 0.28	+ 0.56	+ 1.45	+ 2.00	+ 0.98	- 0.32	- 0.87	- 0.79	- 0.51	- 0.61	+ 0.52	6
111.4	100.0	94.3	100.4	107.6	84.3	68.7	51.9	53.0	58.1	51.0	59.0	6
+ 0.89	+ 0.36	+ 0.26	+ 1.04	+ 1.91	+ 0.49	- 0.35	- 1.28	- 0.87	- 0.17	- 0.42	+ 1.10	6
101.0	100.0	103.1	104.1	108.2	87.7	69.0	57.9	57.2	62.3	65.0	64.3	6
- 0.18	+ 0.09	+ 0.66	+ 1.07	+ 1.71	+ 0.58	- 0.43	- 0.88	- 0.59	+ 0.12	- 0.11	- 0.77	6
102.9	100.0	77.3	107.8	108.6	103.9	81.2	67.6	61.7	60.2	60.2	62.9	6
- 0.01	- 0.02	- 1.74	+ 1.43	+ 1.87	+ 1.81	+ 0.09	- 0.9	- 0.96	- 0.73	- 0.10	- 0.29	6
102.5	100.0	107.3	105.8	101.4	97.8	73.8	65.4	60.2	66.2	65.0	64.3	6
- 0.24	- 0.18	+ 0.85	+ 1.11	+ 1.29	+ 1.19	- 0.51	- 0.85	- 0.91	+ 0.00	- 0.15	- 0.27	6

Indexes and Cycles of Economic Time Series, showing (a) End Point of 1919, (b) The Volume of Business and (d) The Standard Deviation

Table 14. Prices of Representative

No.	Classification	(a. c.)	(b. d.) ¹	Index Cycle	1919	1920	1921	1922	1923	1924
12	Cotton, raw 1-11/16 [®] Hamilton	a. 180.92 c. .208	b.- 9.16 d. 28.72	198.0 + 0.59	228.4 + 1.97	88.2 - 2.59	120.1 - 1.16	162.4 + 0.62	156.7 + 0.75	
13	Silk, raw, New York ...	a. 139.76 c. .678	b.- 7.43 d. 12.72	134.2 - 0.44	144.8 + 0.98	92.0 - 2.59	111.9 - 0.44	130.1 + 1.58	93.2 - 0.74	
14	Wool, Eastern Bright, 1/4 Bleed	a. 137.12 c. .381	b.- 6.22 d. 28.49	196.1 + 2.07	130.7 - 0.007	65.4 - 2.08	70.9 - 1.67	102.0 - 0.36	117.0 + 0.39	
15	Pulp, groundwood, No. 1.	a. 185.55 c. .089	b.- 0.65 d. 55.04	108.0 - 1.41	358.7 + 3.32	144.3 - 0.40	92.9 - 1.16	134.5 - 0.23	107.0 - 0.55	
16	Pig Iron, Malleable	a. 165.96 c. .253	b.- 6.93 d. 25.25	165.7 - 0.01	243.4 + 3.34	136.5 - 0.62	127.4 - 0.70	136.5 - 0.07	105.8 - 1.01	
17	Copper, electrolytic domestic	a. 130.47 c. .832	b.- 4.71 d. 15.67	134.4 + 0.25	137.0 + 0.72	103.6 - 1.11	101.7 - 0.93	108.0 - 0.23	97.1 - 0.63	
18	Lead, Domestic, Montreal	a. 101.56 c. .592	b.- 3.36 d. 15.35	80.1 - 1.40	108.7 + 0.68	70.4 - 1.59	76.3 - 0.99	87.7 - 0.03	99.1 + 0.93	
19	Tin Ingots, Straits Toronto	a. 81.46 c. .356	b.- 1.12 d. 17.30	86.8 + 0.31	90.7 + 0.60	56.4 - 1.32	54.3 - 1.38	71.0 - 0.35	79.7 + 0.22	
20	Coal, Anthracite, Toronto	a. 86.11 c. .495	b.- 0.94 d. 6.37	68.8 - 2.72	85.1 - 0.31	93.4 + 0.85	86.5 - 0.38	87.8 - 0.32	90.3 - 0.08	
21	Gasoline, Toronto	a. 136.73 c. .406	b.- 5.46 d. 9.75	128.5 - 0.84	152.6 + 2.19	138.8 + 1.33	129.3 + 0.92	102.0 - 1.32	100.0 - 0.97	

Table 15. Cost

Cost of Living Indexes -				1919	1920	1921	1922	1923	1924
1	Total	a. 113.28 c. .556	b.- 2.08 d. 5.75	107.2 - 1.06	124.2 + 2.26	109.2 + 0.01	100.0 - 1.22	100.0 - 0.86	98.0 - 0.85
2	Food	a. 119.88 c. .543	b.- 3.39 d. 11.65	122.5 + 0.22	141.1 + 2.11	107.9 - 0.45	91.4 - 1.57	92.1 - 1.22	90.7 - 1.05
3	Fuel	a. 103.56 c. .207	b.- 0.82 d. 5.21	86.2 - 3.33	102.6 - 0.02	109.2 + 1.40	104.6 + 0.68	104.6 + 0.84	102.0 + 0.50
4	Rent	a. 94.03 c. .574	b.- 0.21 d. 8.65	75.6 - 2.13	86.5 - 0.89	94.2 - 0.03	98.1 + 0.40	100.6 + 0.66	101.3 + 0.72
5	Clothing	a. 131.69 c. .274	b.- 4.30 d. 8.91	125.9 - 0.65	153.2 + 2.90	124.7 + 0.18	105.7 - 1.47	104.4 - 1.13	101.9 - 0.93
6	Cost per Week of Family Budget	a. 111.38 c. .743	b.- 2.14 d. 7.04	103.3 - 1.15	120.5 + 1.60	105.6 - 0.21	97.2 - 1.10	98.1 - 0.67	96.3 - 0.62

Table 16. Security Prices

Security Prices				1919	1920	1921	1922	1923	1924
1	Common Stock Prices, Total	a. 72.11 c. .956	b. 2.70 d. 36.47	65.7 - 0.18	66.9 - 0.22	57.8 - 0.54	62.6 - 0.48	68.5 - 0.40	70.6 - 0.41
2	Industrials, Total	a. 56.98 c. .896	b. 6.23 d. 52.94	53.9 - 0.06	62.1 - 0.02	48.8 - 0.39	53.8 - 0.41	60.0 - 0.41	61.1 - 0.51
3	Iron and Steel	a. 85.62 c. .906	b. 4.48 d. 68.15	84.6 - 0.02	85.7 - 0.06	66.2 - 0.42	69.4 - 0.44	70.3 - 0.49	76.7 - 0.46

Annual Increment, (c) The Coefficient of Correlation with the index of the Physical
from the Trend based on 1919 to 1934.

Commodities - Concluded.

1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	x.
134.0	100.0	98.5	110.3	102.6	76.3	51.0	43.8	54.6	70.6	71.7	72.7	17
+ 0.28	- 0.58	- 0.32	+ 0.41	+ 0.46	- 0.13	- 0.70	- 0.63	+ 0.07	+ 0.94	+ 1.30	+ 1.65	17
97.3	100.0	88.5	82.4	81.2	60.5	45.4	30.9	29.0	23.1	28.7	28.6	17
+ 0.17	+ 0.96	+ 0.64	+ 0.75	+ 1.24	+ 0.19	- 0.41	- 0.96	- 0.53	- 0.41	+ 0.61	+ 1.19	18
130.7	100.0	85.3	112.7	94.1	58.2	46.7	33.7	44.8	59.2	50.0	65.8	18
+ 1.08	+ 0.23	- 0.07	+ 1.14	+ 0.67	- 0.37	- 0.55	- 0.79	- 0.18	+ 0.54	+ 0.43	+ 1.21	18
97.4	100.0	93.7	89.4	92.2	94.3	86.0	72.6	68.8	71.0	65.2	67.7	19
- 0.55	- 0.33	- 0.27	- 0.17	+ 0.57	+ 0.27	+ 0.30	+ 0.23	+ 0.33	+ 0.55	+ 0.62	+ 0.84	19
102.5	100.0	94.9	92.0	95.3	90.9	83.2	83.2	83.2	83.2	83.2	83.6	19
- 0.87	- 0.69	- 0.62	- 0.46	- 0.05	+ 0.05	+ 0.002	+ 0.29	+ 0.56	+ 0.84	+ 1.11	+ 1.40	19
102.6	100.0	93.8	104.0	126.7	95.0	63.5	47.7	55.1	52.1	53.8	63.9	19
+ 0.02	+ 0.16	+ 0.06	+ 1.02	+ 2.77	+ 1.04	- 0.67	- 1.42	- 0.60	- 0.49	- 0.09	+ 0.86	19
111.6	100.0	82.9	74.3	81.9	67.4	51.1	43.0	45.4	41.8	48.1	56.9	19
+ 1.97	+ 1.43	+ 0.54	+ 0.19	+ 0.91	+ 0.18	- 0.66	- 0.97	- 0.59	- 0.61	+ 0.02	+ 0.81	19
88.6	100.0	98.2	79.2	72.2	52.6	42.0	43.9	68.3	85.0	82.8	78.5	19
+ 0.80	+ 1.52	+ 1.49	+ 0.45	+ 0.11	- 0.96	- 1.50	- 1.33	+ 0.15	+ 1.18	+ 1.11	+ 0.93	19
96.3	100.0	98.4	98.6	98.2	97.5	97.9	95.9	91.4	89.4	86.7	79.4	20
+ 0.71	+ 1.15	+ 0.75	+ 0.63	+ 0.42	+ 0.16	+ 0.08	- 0.38	- 1.24	- 1.70	- 2.27	- 3.56	20
93.7	100.0	83.4	78.7	78.7	76.3	66.8	70.8	68.4	64.4	62.1	58.9	21
- 1.05	+ 0.15	- 0.99	- 0.91	- 0.35	- 0.04	- 0.45	+ 0.52	+ 0.83	+ 0.98	+ 1.30	+ 1.54	21

of Living

99.3	100.0	98.4	98.9	99.9	99.2	89.6	82.0	78.0	78.9	79.2	80.7	1
- 0.26	+ 0.22	+ 0.31	+ 0.75	+ 1.29	+ 1.53	+ 0.22	- 0.74	- 1.07	- 0.55	- 0.12	+ 0.48	1
94.7	100.0	98.1	98.6	101.0	98.6	77.3	64.3	63.7	69.3	70.4	73.4	2
- 0.42	+ 0.33	+ 0.46	+ 0.79	+ 1.29	+ 1.37	- 0.16	- 0.99	- 0.75	+ 0.02	+ 0.41	+ 0.96	2
100.0	100.0	97.9	96.9	96.4	95.7	94.2	91.7	87.6	87.8	86.8	86.6	3
+ 0.28	+ 0.43	+ 0.19	+ 0.16	+ 0.22	+ 0.24	+ 0.11	- 0.21	- 0.83	- 0.64	- 0.67	- 0.55	3
101.3	100.0	98.8	101.2	103.3	105.9	103.0	94.7	85.1	80.1	81.3	83.7	4
+ 0.69	+ 0.52	+ 0.36	+ 0.61	+ 0.83	+ 1.11	+ 0.75	- 0.24	- 1.37	- 1.97	- 1.86	- 1.56	4
101.9	100.0	97.5	97.4	96.9	93.9	82.2	72.8	67.9	64.7	70.7	70.5	5
- 0.45	- 0.18	+ 0.02	+ 0.49	- 0.29	-	+ 0.24	0.34	- 0.40	- 0.28	+ 0.88	+ 1.34	5
98.1	100.0	98.6	99.1	100.5	99.1	87.0	74.4	73.0	74.4	75.3	77.6	6
- 0.06	+ 0.51	+ 0.62	+ 0.99	+ 1.49	+ 1.60	+ 0.18	- 1.30	- 1.20	- 0.69	- 0.21	+ 0.37	6

and Speculative Trading

80.7	100.0	123.4	159.6	190.7	136.2	85.2	55.6	68.6	85.7	93.7	111	1
- 0.21	+ 0.25	+ 0.81	+ 1.73	+ 2.51	+ 0.94	- 0.53	- 1.42	- 1.13	- 0.74	- 0.59	+ 0.61	1
75.8	100.0	131.6	186.1	275.3	171.8	97.7	63.3	94.2	123.9	145.2	116	2
- 0.35	- 0.01	+ 0.47	+ 1.38	+ 2.95	+ 0.87	- 0.64	- 1.41	- 0.94	- 0.50	- 0.22	0.60	2
87.6	100.0	161.0	251.3	312.1	194.1	108.9	59.8	72.4	107.4	122.6	111	3
- 0.37	- 0.25	+ 0.58	+ 1.84	+ 2.67	+ 0.87	- 0.45	- 1.23	- 1.11	- 0.67	- 0.51	- 0.37	3

Indexes and Cycles of Economic Time Series showing (a) Trend Point of 1919, (b) The

Volume of Business and (d) The Standard Deviation

Table 16. Security Prices and

No.	Classification	(a. (c.)	b. ¹ (d.)	1919	1920	1921	1922	1923	1924
4	Pulp and Paper	a. 101.15	b. - 4.64	Index	64.9	99.7	69.6	75.5	80.1
		c. .881	d. 30.01	Cycle	- 1.21	+ 0.11	- 0.74	- 0.39	- 0.08
5	Milling	a. 83.59	b. 2.03		79.3	74.3	61.6	66.9	72.3
		c. .930	d. 48.04		- 0.09	- 0.24	- 0.54	- 0.47	- 0.40
6	Textiles and Clothing ..	a. 73.28	b. 0.21		51.1	57.7	52.8	65.8	80.3
		c. .831	d. 24.97		- 0.89	- 0.63	- 0.84	- 0.32	+ 0.25
7	Food and Allied Products	a. 34.51	b. 7.57		42.3	40.9	29.5	34.0	40.0
		c. .906	d. 30.77		+ 0.25	- 0.03	- 0.64	- 0.74	- 0.78
8	Transportation	a. 109.55	b. - 2.59		101.7	87.2	81.4	89.1	96.2
		c. .968	d. 29.37		- 0.27	- 0.67	- 0.78	- 0.43	- 1.02
9	Telephone and Telegraph	a. 87.99	b. 0.82		89.0	75.4	75.8	80.4	88.0
		c. .943	d. 14.67		+ 0.07	- 0.91	- 0.94	- 0.69	- 0.22
10	Power and Traction	a. 52.17	b. 4.07		41.6	38.9	38.5	42.5	50.1
		c. .934	d. 37.45		- 0.28	- 0.46	- 0.58	- 0.58	- 0.49
11	Banks	a. 94.45	b. 0.25		90.5	86.7	85.0	84.7	88.1
		c. .938	d. 19.82		- 0.20	- 0.40	- 0.50	- 0.53	- 0.37
12	Ontario Bond Yields ...	a. 118.17	b. - 1.85		117.5	124.8	124.5	113.4	108.6
		c. .582	d. 6.67		- 0.10	+ 1.27	+ 1.50	+ 0.12	- 0.33
13	Shares Traded, Montreal	a. 56.39	b. 7.03		57.3	59.4	29.8	42.3	35.9
		c. .871	d. 90.02		+ 0.01	- 0.04	- 0.45	- 0.39	- 0.54

Table 17. Banking

Banking -									
1	Total Quick Assets..	a. 81.56	b. 1.86	86.1	81.5	79.4	82.9	84.4	94.5
2	Demand Deposits	a. 107.17	b. - 0.53	113.8	118.2	102.8	90.8	94.6	92.5
		c. .720	d. 11.75	+ 0.56	+ 0.98	- 0.28	- 1.26	- 0.89	- 1.02
3	Notice Deposits	a. 98.22	b. 1.37	83.9	92.4	96.1	88.9	89.3	89.3
		c. .695	d. 5.20	- 0.91	+ 0.46	+ 0.91	- 0.74	- 0.93	- 1.19
4	Current Loans	a. 124.88	b. - 1.10	116.9	143.7	133.4	120.1	112.6	104.8
		c. .388	d. 15.34	- 0.52	+ 1.30	+ 0.70	- 0.10	- 0.51	- 0.95
5	Investment Holdings ..	a. 64.54	b. 5.00	98.7	71.2	69.2	62.2	75.4	94.3
		c. .579	d. 16.59	+ 2.06	+ 0.10	- 0.32	- 1.05	- 0.55	+ 0.29
6	Call Loans, Canada ..	a. 82.53	b. 2.85	69.3	85.3	78.6	72.7	71.2	78.1
		c. .893	d. 38.08	- 0.35	- 0.002	- 0.25	- 0.48	- 0.60	- 0.49
7	Call Loans, Elsewhere	a. 106.48	b. - 4.25	65.3	80.1	68.8	71.4	79.3	72.7
		c. .858	d. 26.42	- 1.56	- 0.84	- 1.10	- 0.85	- 0.39	- 0.47
8	Notes in Hands of Public	a. 107.79	b. - 1.43	120.4	119.0	95.1	84.7	88.6	99.3
		c. .520	d. 9.24	+ 1.36	+ 1.37	- 1.06	- 2.09	- 1.46	- 0.15

Annual increment, (c) the Coefficient of Correlation with the index of the price of
from the Trend based on 1919 to 1934.

Speculative Trading ~ Concluded.

1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	No.
73.6	100.0	109.1	126.9	95.0	50.9	15.5	7.3	7.5	11.7	12.5	20.6	1
+ 0.01	+ 1.01	+ 1.50	- 2.25	+ 1.34	+ 0.03	1.00	- 1.12	- 6.70	- 0.66	- 0.48	- 0.06	
92.0	100.0	134.8	184.1	235.5	141.7	75.0	55.6	63.0	73.0	62.7	92.5	5
- 0.08	+ 0.05	+ 0.73	+ 1.71	+ 2.74	+ 0.74	- 0.69	- 1.13	- 1.02	- 0.85	- 1.11	- 0.53	
88.0	100.0	122.6	125.1	95.1	72.0	53.0	36.4	31.6	14.4	69.4	71.3	6
+ 0.54	+ 1.01	+ 1.91	+ 2.00	+ 0.79	- 0.22	- 0.91	- 1.59	- 0.99	- 0.09	- 0.29	- 0.22	
77.4	100.0	129.1	163.3	173.3	126.6	111.8	85.2	109.6	127.5	132.3	159.9	7
- 0.04	+ 0.45	+ 1.16	+ 2.03	+ 2.12	+ 0.36	- 0.36	- 1.47	- 0.91	- 0.57	- 0.65	+ 0.003	
93.5	100.0	118.2	135.4	144.8	119.0	69.2	37.7	36.2	36.0	27.1	32.1	8
- 0.02	+ 0.29	+ 1.00	+ 1.67	+ 2.08	+ 1.29	- 0.32	- 1.30	- 1.26	- 1.18	- 1.40	- 1.14	
99.8	100.0	107.9	118.9	120.1	113.1	101.0	72.1	77.3	90.8	100.2	113.0	9
+ 0.47	+ 0.45	+ 0.91	+ 1.60	+ 1.63	+ 1.10	+ 0.22	- 1.81	- 1.51	- 0.65	- 0.06	+ 0.75	
73.2	100.0	133.9	156.9	161.2	137.6	101.6	59.8	59.0	65.0	58.7	71.0	10
- 0.09	+ 0.52	+ 1.31	+ 1.82	+ 1.82	+ 1.09	+ 0.02	- 1.21	- 1.34	- 1.29	- 1.56	- 1.34	
94.1	100.0	115.1	139.9	134.8	115.4	100.7	75.3	69.2	75.4	73.5	80.2	11
- 0.009	+ 0.19	+ 0.94	+ 2.18	+ 1.91	+ 0.92	+ 0.16	- 1.13	- 1.45	- 1.15	- 1.26	- 0.93	
99.7	100.0	94.9	92.5	102.2	98.3	96.6	108.7	97.7	85.7	80.9	74.9	12
- 1.10	- 0.78	- 1.27	- 1.35	- 0.38	+ 0.07	- 0.09	- 2.19	- 0.08	- 0.70	- 1.15	- 1.77	
65.0	100.0	151.2	289.3	363.3	219.8	75.0	41.0	107.9	65.2	61.6	126.7	13
- 0.37	- 0.06	+ 0.43	+ 1.88	+ 2.63	+ 0.96	- 0.73	- 1.19	- 0.52	- 1.07	- 1.19	- 0.55	

and Currency

99.8	100.0	99.7	102.1	107.7	90.8	94.4	96.0	110.6	118.2	137.3	161.8	1
+ 1.10	+ 0.84	+ 0.50	+ 0.59	+ 1.17	- 1.74	- 1.47	- 1.51	+ 0.46	+ 1.35	+ 4.02	+ 7.53	
95.9	100.0	107.6	122.4	125.8	113.2	104.6	87.9	88.3	92.8	102.7	111.7	2
- 0.69	- 0.29	+ 0.40	+ 1.70	+ 2.04	+ 1.01	+ 0.32	- 1.05	- 0.97	- 0.55	+ 0.34	+ 1.15	
94.7	100.0	104.3	111.6	110.4	106.5	107.2	102.6	102.8	102.4	107.8	113.3	3
- 0.41	+ 0.34	+ 0.91	+ 2.05	+ 1.55	+ 0.54	+ 0.41	- 0.74	- 0.96	- 1.30	- 0.53	+ 0.27	
96.6	100.0	109.6	126.0	143.7	137.9	120.3	110.4	97.0	93.0	88.7	74.8	4
- 1.41	- 1.12	- 0.42	+ 0.72	+ 1.94	+ 1.64	+ 0.56	- 0.01	- 0.81	- 1.00	- 1.21	- 2.05	
106.1	100.0	97.7	97.9	93.6	88.5	126.7	130.6	157.8	162.7	196.0	250.3	5
+ 0.70	+ 0.03	- 0.41	- 0.70	- 1.26	- 1.87	+ 0.13	- 0.06	+ 1.40	+ 1.40	+ 3.10	+ 6.07	
86.0	100.0	135.2	181.7	191.7	162.6	122.1	83.8	73.4	72.7	59.1	66.8	
- 0.36	- 0.07	+ 0.73	+ 1.93	+ 2.12	+ 1.28	+ 0.14	- 0.94	- 1.29	- 1.38	- 1.81	- 1.69	
90.2	100.0	107.4	107.1	120.5	75.1	133.5	32.7	36.9	42.7	28.6	25.7	
+ 0.35	+ 0.88	+ 1.32	+ 1.47	+ 2.14	+ 0.58	- 0.45	- 0.70	- 0.38	0.00	- 0.37	- 0.32	
97.5	100.0	102.1	105.1	106.2	96.1	87.0	82.8	83.2	86.4	92.0	99.8	
- 0.19	+ 0.24	+ 0.62	+ 1.10	+ 1.38	+ 0.44	- 0.59	- 0.69	0.49	+ 0.01	+ 0.77	+ 1.77	

Indexes and Cycles of Economic Time Series showing (a) Trend Point of 1919, (b) The
Volume of Expansion and (c) The Standard Deviation

No.	Classification	(a. b.) ¹		Index	1919	1920	1921	1922	1923	1924
		(c.)	(d.)							
<u>Bank Clearings -</u>										
1	Maritime Provinces	a. 125.19	b. - 3.17	Index	119.0	135.7	116.3	109.3	103.8	97.7
		c. .788	d. 12.73	Cycle	- 0.49	+ 1.07	- 0.20	- 0.50	- 0.68	- 0.91
2	Quebec	a. 112.14	b. - 1.09		109.7	125.4	101.1	90.2	97.2	94.6
		c. .856	d. 20.54		- 0.12	+ 0.70	- 0.43	- 0.91	- 0.52	- 0.59
3	Toronto	a. 99.99	b. 0.84		81.8	104.1	98.2	95.7	107.6	101.1
		c. .875	d. 18.83		- 0.97	+ 0.17	- 0.18	- 0.36	+ 0.23	- 0.16
4	Ontario	a. 101.54	b. 0.41		84.7	106.8	98.4	95.0	105.2	98.9
		c. .894	d. 18.29		- 0.92	+ 0.27	- 0.22	- 0.42	+ 0.11	- 0.26
5	Prairie Provinces	a. 99.03	b. - 0.14		88.1	88.1	111.4	90.0	89.5	94.6
		c. .777	d. 15.69		- 0.70	- 0.69	+ 0.81	- 0.55	- 0.57	- 0.24
6	British Columbia	a. 91.70	b. 0.28		77.7	101.1	82.9	78.6	85.2	90.7
		c. .934	d. 18.25		- 0.77	+ 0.50	- 0.51	- 0.76	- 0.42	- 0.13
7	Canada	a. 104.92	b. - 0.34		94.2	114.3	98.5	91.6	97.8	96.0
		c. .799	d. 17.49		- 0.61	+ 0.56	- 0.33	- 0.13	- 0.33	- 0.41

Table 19. Dominion Government

<u>Receipts -</u>										
1	Customs Receipts	a. 108.95	b. - 2.63		118.9	115.0	74.4	83.2	85.6	76.2
		c. .891	d. 23.15		+ 0.43	+ 0.81	- 1.27	- 0.77	- 0.55	- 0.85
2	Excise	a. 83.65	b. 1.38		88.0	76.5	75.8	73.7	78.7	79.6
		c. .936	d. 19.22		+ 0.23	- 0.44	- 0.55	- 0.73	- 0.54	- 0.57
3	Income Tax	a. 100.55	b. 2.88		42.8	97.9	166.0	126.0	114.4	118.7
		c. .062	d. 23.01		- 2.51	- 0.24	+ 2.59	+ 0.73	+ 0.10	+ 0.16
4	Sales Tax	a. 88.02	b. - 1.60		-	46.3	74.7	110.9	122.7	81.0
		c. -.177	d. 23.63		-	- 1.77	- 0.50	+ 1.10	+ 1.67	- 0.03
5	Tax on cheques, transfer tax, etc.	a. 75.18	b. 3.14		66.9	174.6	52.1	65.3	84.5	82.0
		c. -.373	d. 37.52		- 0.22	+ 2.57	- 0.78	- 0.51	- 0.09	- 0.24
6	Total Receipts from tax- ation	a. 99.76	b. - 0.88		84.7	106.4	92.3	96.8	98.6	84.8
		c. .801	d. 10.86		- 1.39	+ 0.69	- 0.52	- 0.29	+ 0.22	- 0.97
7	Total Consolidated Fund Receipts	a. 101.63	b. - 0.86		87.7	109.0	95.8	99.0	99.5	87.0
		c. .784	d. 10.02		- 1.39	+ 0.82	- 0.41	- 0.01	+ 0.13	- 1.03
8	Total Receipts	a. 103.16	b. - 0.98		87.3	108.9	95.5	100.7	101.5	87.8
		c. .792	d. 10.16		- 1.56	+ 0.66	- 0.56	+ 0.05	+ 0.22	- 1.03
<u>Expenditure -</u>										
9	Interest on Debt	a. 99.33	b. 0.14		82.9	107.6	104.3	106.3	105.1	103.9
		c. -.439	d. 6.63		- 2.48	+ 1.23	+ 0.71	+ 0.99	+ 0.79	+ 0.58
10	Post Office Expenditures	a. 82.44	b. 1.90		67.0	73.2	90.7	89.6	91.3	96.3
		c. .732	d. 9.25		- 1.67	- 1.20	+ 0.48	+ 0.16	+ 0.14	+ 0.47
11	Subsidies to Provinces ..	a. 91.88	b. 1.52		91.8	91.8	97.6	97.5	99.0	98.1
		c. .050	d. 8.31		- 0.01	- 0.19	+ 0.32	+ 0.13	+ 0.13	- 0.17
12	Trade and Commerce	a. 65.45	b. 4.80		40.7	50.9	99.6	66.9	76.3	102.2
		c. .241	d. 30.01		- 0.82	- 0.64	+ 0.82	- 0.43	- 0.28	+ 0.42
13	Total Ordinary Expendit- ure	a. 101.04	b. 0.88		95.1	113.0	108.8	104.0	101.6	99.8
		c. .079	d. 5.71		- 1.04	+ 1.94	+ 1.05	+ 0.06	- 0.52	- 0.99
14	Grand Total Expenditure.	a. 136.71	b. - 1.56		219.2	147.3	129.3	121.2	103.4	97.9
		c. -.443	d. 28.00		+ 2.95	+ 0.43	- 0.15	- 0.39	- 0.97	- 1.11

1/ See heading above for definition of a, b, c, and d.

NOTE: - In the preparation of this table, data were moved to the nearest calendar year, e.g. the fiscal

Annual Increment, (c) The Coefficient of Correlation with the index of the Physical
from the Trend based on 1919 to 1934.

Clearings

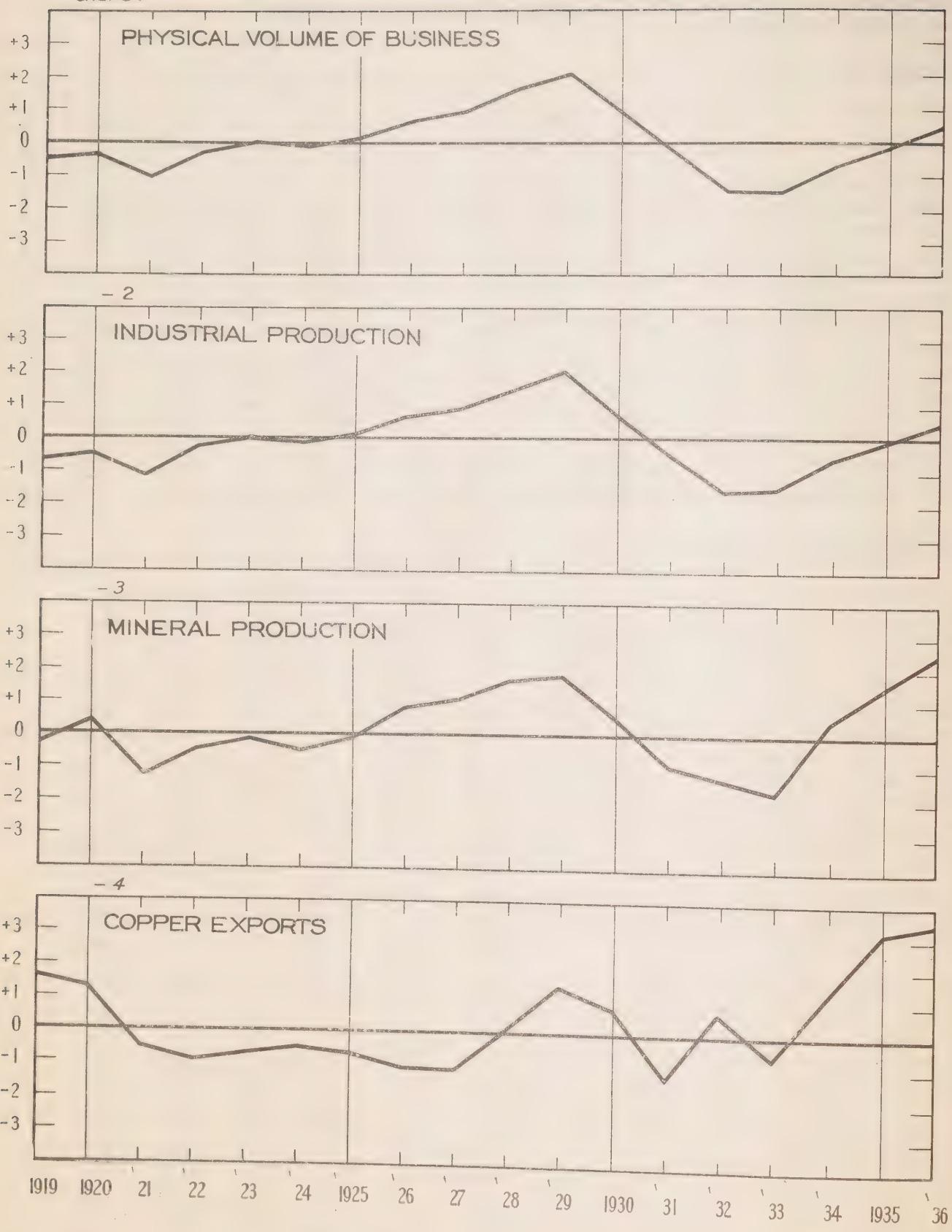
1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	No
93.6	100.0	103.0	116.5	121.9	105.7	92.2	71.0	62.6	69.4	70.2	74.7	1
- 0.59	- 0.24	+ 0.25	+ 1.56	+ 2.23	+ 1.21	+ 0.40	- 1.02	- 1.43	- 0.65	- 0.34	+ 0.27	
91.2	100.0	119.3	141.2	144.9	121.5	101.4	70.1	74.4	81.2	80.2	93.8	2
- 0.70	- 0.22	+ 0.77	+ 1.89	+ 2.13	+ 1.04	+ 0.11	- 1.36	- 1.09	- 0.71	- 0.71	+ 0.01	
94.6	100.0	124.8	147.7	148.6	116.1	98.8	78.3	94.6	108.6	110.1	100.0	3
- 0.55	- 0.31	+ 0.96	+ 2.13	+ 2.14	+ 0.36	- 0.60	- 1.73	- 0.91	- 0.21	- 0.18	- 0.76	
93.6	100.0	122.3	143.5	145.5	115.7	97.4	76.9	88.7	101.2	116.1	130.2	4
- 0.57	- 0.24	+ 0.96	+ 2.09	+ 2.18	+ 0.53	- 0.50	- 1.64	- 1.02	- 0.35	+ 0.44	+ 1.19	
102.4	100.0	105.0	132.3	132.8	98.0	82.9	71.5	91.7	89.3	90.0	99.0	5
+ 0.27	+ 0.12	+ 0.45	+ 2.20	+ 2.24	+ 0.03	- 0.92	- 1.64	- 0.34	- 0.49	- 0.43	+ 0.15	
90.6	100.0	104.5	124.0	139.2	112.0	88.6	70.4	73.0	82.3	85.5	103.3	6
- 0.15	+ 0.35	+ 0.58	+ 1.63	+ 2.45	+ 0.94	- 0.75	- 1.37	- 1.24	- 0.75	- 0.59	+ 0.37	
94.6	100.0	116.1	138.6	141.7	113.4	95.0	72.9	83.1	90.1	95.6	108.4	7
- 0.47	- 0.15	+ 0.79	+ 2.10	+ 2.30	+ 0.70	- 0.33	- 1.58	- 0.98	- 0.56	- 0.22	+ 0.52	

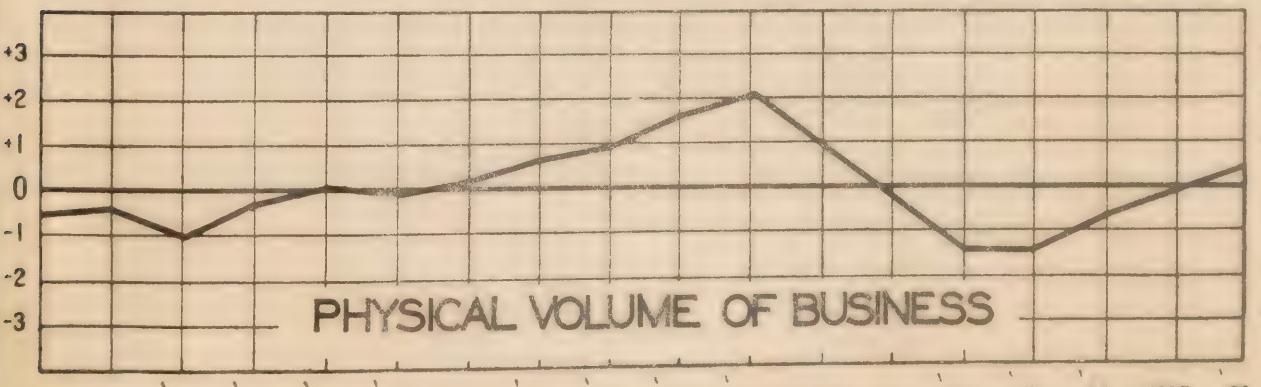
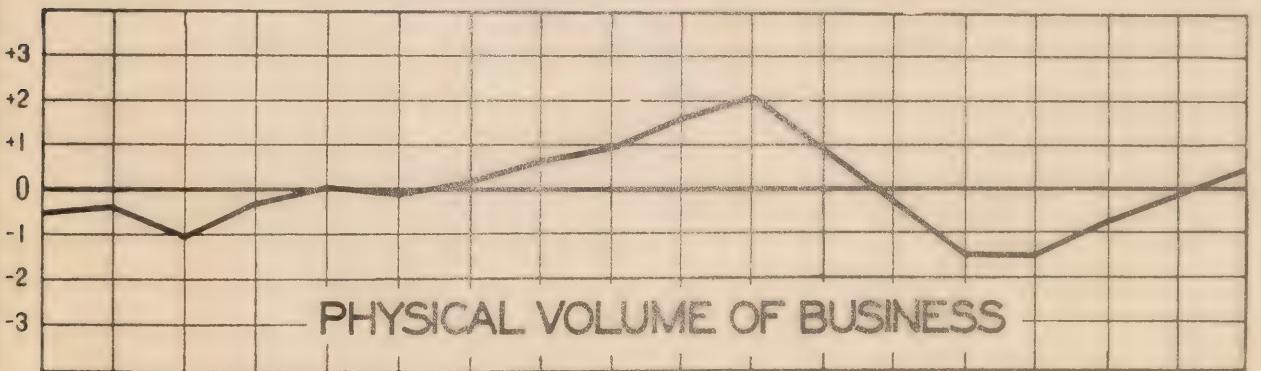
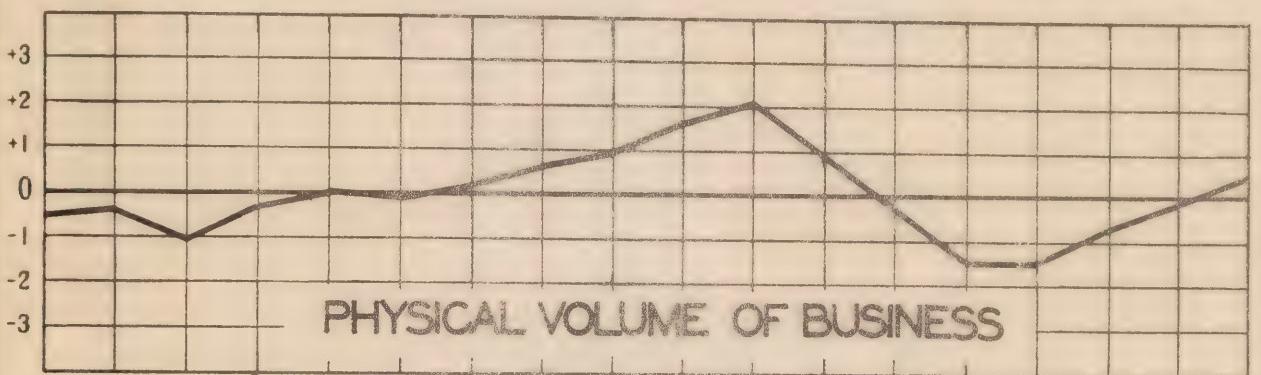
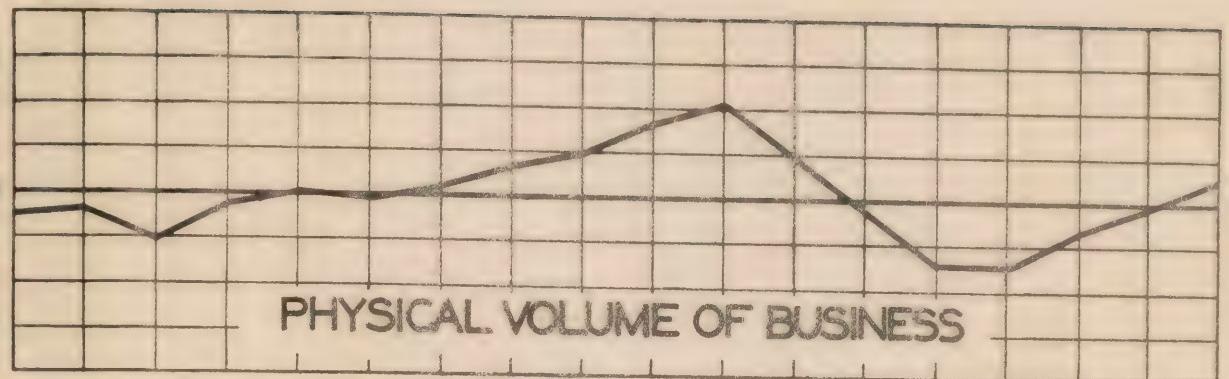
Revenues and Expenditures

89.7	100.0	110.6	131.9	126.4	92.4	73.3	49.4	46.7	53.9	52.1	59.0	1
- 0.15	+ 0.41	+ 0.98	+ 2.01	+ 1.89	+ 0.53	- 0.18	- 1.10	- 1.10	- 0.67	- 0.64	- 0.23	
88.5	100.0	118.3	131.3	134.1	119.0	100.3	78.0	73.2	89.0	91.5	94.7	2
- 0.18	+ 0.35	+ 1.23	+ 1.83	+ 1.91	+ 1.05	+ 0.01	- 1.23	- 1.55	- 0.80	- 0.74	- 0.65	
117.3	100.0	119.4	125.4	145.7	149.9	129.3	131.0	129.6	141.0	174.5	216.0	3
- 0.02	- 0.90	- 0.18	- 0.05	+ 0.72	+ 0.77	- 0.25	- 0.30	- 0.49	- 0.12	+ 1.21	+ 2.89	
89.9	100.0	85.9	76.1	53.6	24.5	51.5	70.4	76.8	88.0	94.2	140.3	4
+ 0.42	+ 0.91	+ 0.38	+ 0.04	- 0.85	- 2.01	- 0.80	+ 0.07	+ 0.41	+ 0.95	+ 1.28	+ 3.30	
103.3	100.0	83.9	87.4	82.8	62.6	73.9	103.9	186.0	170.5	150.9	163.5	5
+ 0.25	+ 0.08	- 0.44	- 0.43	- 0.63	- 1.26	- 1.04	- 0.32	+ 1.78	+ 1.29	+ 0.68	+ 0.93	
94.5	100.0	105.2	114.2	109.2	85.5	79.3	73.4	78.4	87.2	91.5	112.3	6
+ 0.01	+ 0.59	+ 1.15	+ 2.06	+ 1.68	- 0.42	- 0.91	- 1.37	- 0.83	+ 0.06	+ 0.54	+ 2.53	
95.5	100.0	106.0	114.2	110.7	87.7	82.7	76.9	81.3	89.9	93.4	111.2	7
- 0.10	+ 0.44	+ 1.12	+ 2.03	+ 1.77	- 0.45	- 0.86	- 1.35	- 0.83	+ 0.12	+ 0.55	+ 2.41	
95.6	100.0	107.3	114.9	111.4	88.9	84.1	77.7	81.0	90.4	93.0	113.4	8
- 0.17	+ 0.36	+ 1.18	+ 2.02	+ 1.78	- 0.34	- 0.72	- 1.25	- 0.83	+ 0.19	+ 0.54	+ 2.65	
100.8	100.0	99.4	96.4	93.7	93.5	93.4	104.1	107.8	106.8	103.7	106.0	9
+ 0.10	- 0.05	- 0.16	- 0.63	- 1.06	- 1.11	- 1.15	+ 0.44	+ 0.98	+ 0.81	+ 0.32	+ 0.65	
98.4	100.0	102.5	108.0	113.0	117.0	111.1	97.2	94.2	97.6	101.4	102.9	10
+ 0.49	+ 0.46	+ 0.53	+ 0.91	+ 1.25	+ 1.48	+ 0.63	- 1.07	- 1.60	- 1.44	- 1.24	- 1.28	
98.9	100.0	100.0	100.3	99.3	139.3	109.4	109.3	109.7	110.0	110.0	109.7	11
- 0.25	- 0.30	- 0.49	- 0.63	- 0.83	+ 3.69	- 0.09	- 0.28	- 0.42	- 0.56	- 0.75	- 0.97	
110.4	100.0	95.3	106.9	117.2	162.6	199.3	111.7	100.4	82.8	209.4	254.1	12
+ 0.54	+ 0.03	- 0.28	- 0.06	+ 0.12	+ 1.48	+ 2.54	- 0.54	- 1.07	- 1.82	+ 2.24	+ 3.57	
100.3	100.0	105.2	109.8	112.0	121.9	117.5	112.2	108.5	112.6	116.3	121.1	13
- 1.05	- 1.26	- 0.50	+ 0.15	+ 0.38	+ 1.96	+ 1.03	- 0.05	- 0.85	- 0.29	+ 0.21	+ 0.89	
99.1	100.0	105.6	108.4	111.0	122.7	125.8	148.3	127.7	133.3	148.5	148.4	14
- 1.01	- 0.92	- 0.67	- 0.51	- 0.36	+ 0.11	+ 0.28	+ 1.14	+ 0.46	+ 0.71	+ 1.31	+ 1.36	

year 1920-1921 was tabulated as if it had been the calendar year 1920.

Chart 1





1919 1920 1921 1922 1923 1924 1925 1926 1927 1928 1929 1930 1931 1932 1933 1934 1935 1936

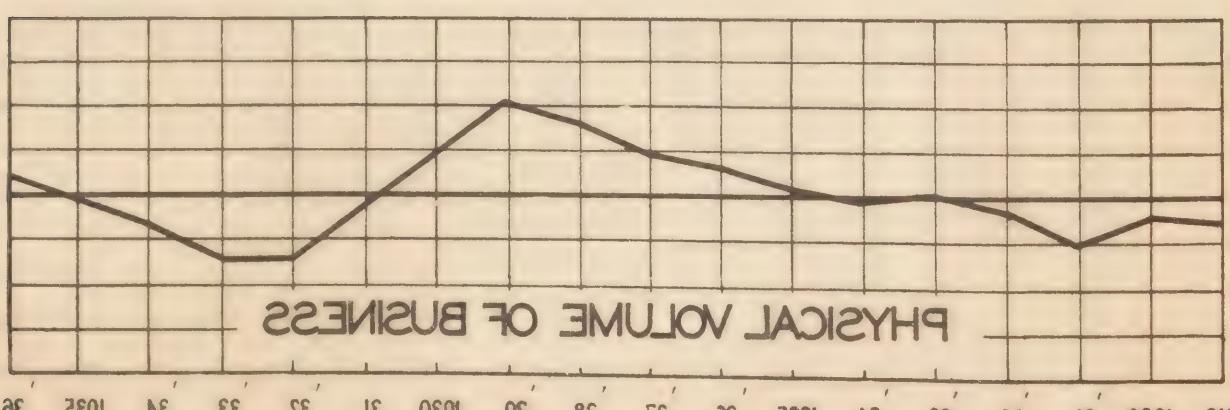
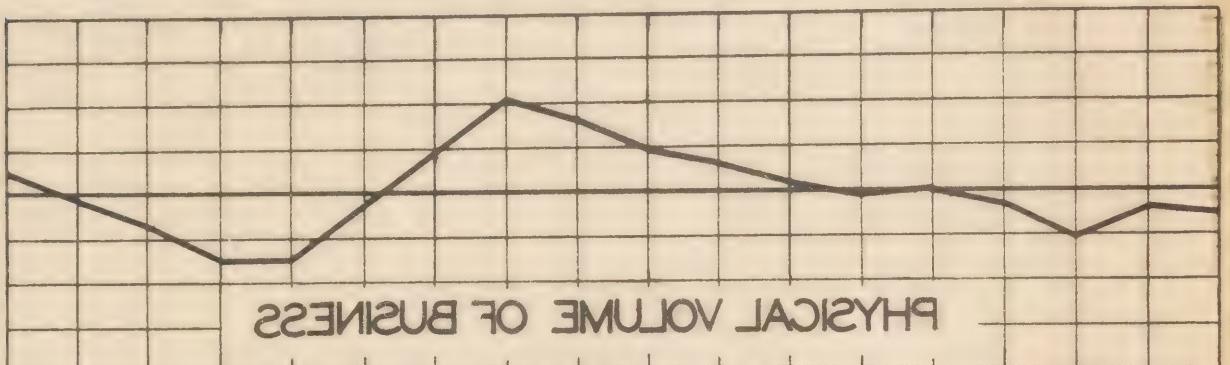
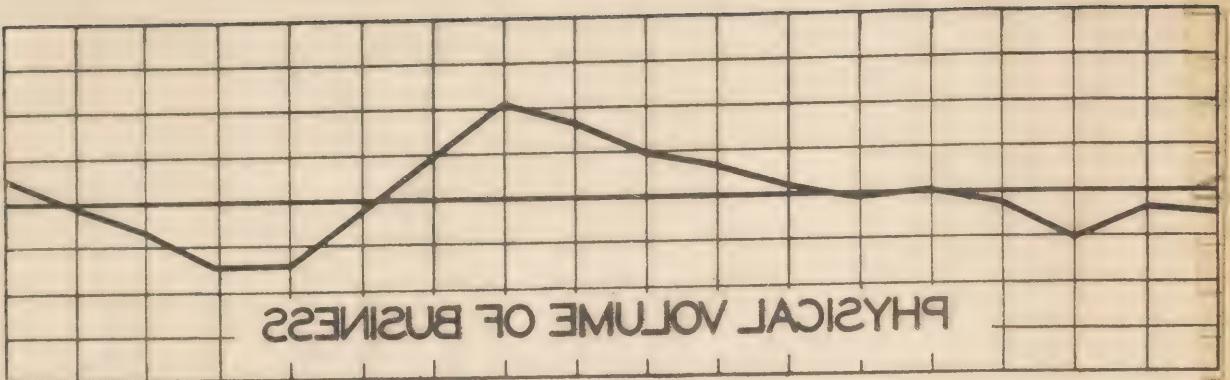
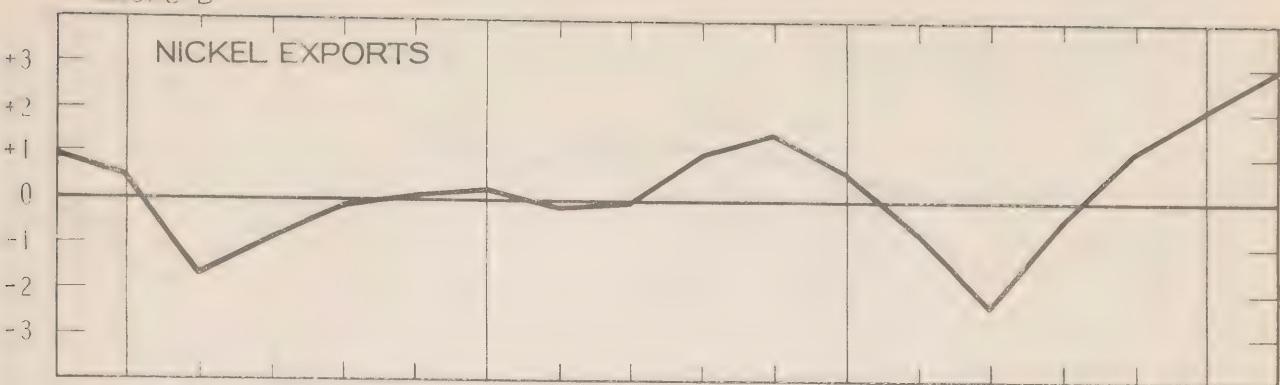
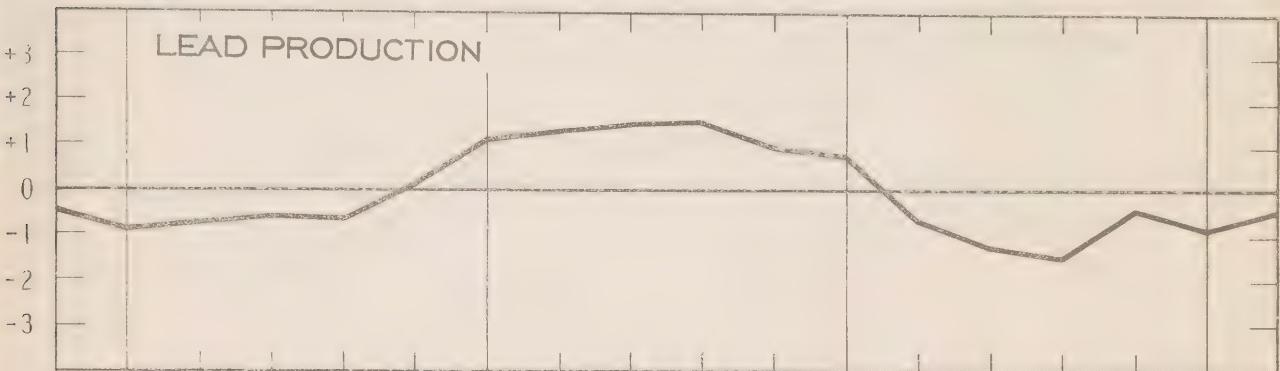


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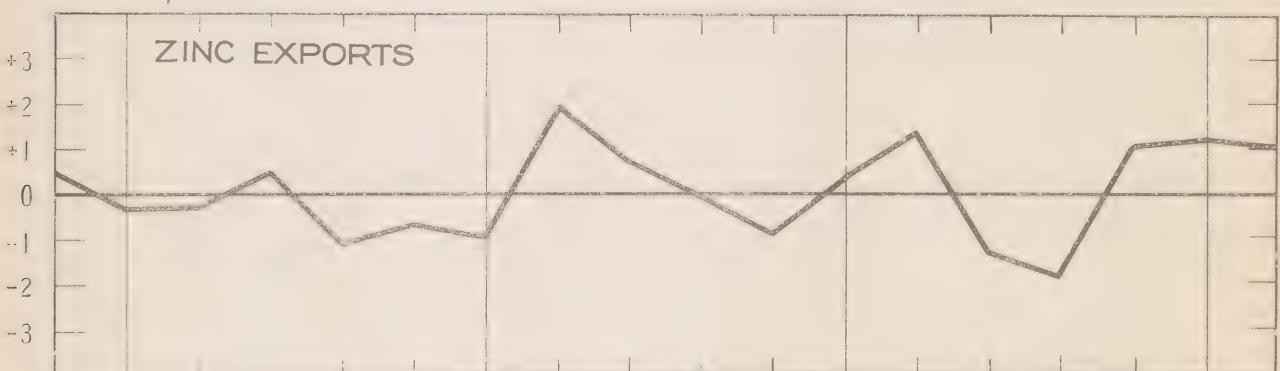
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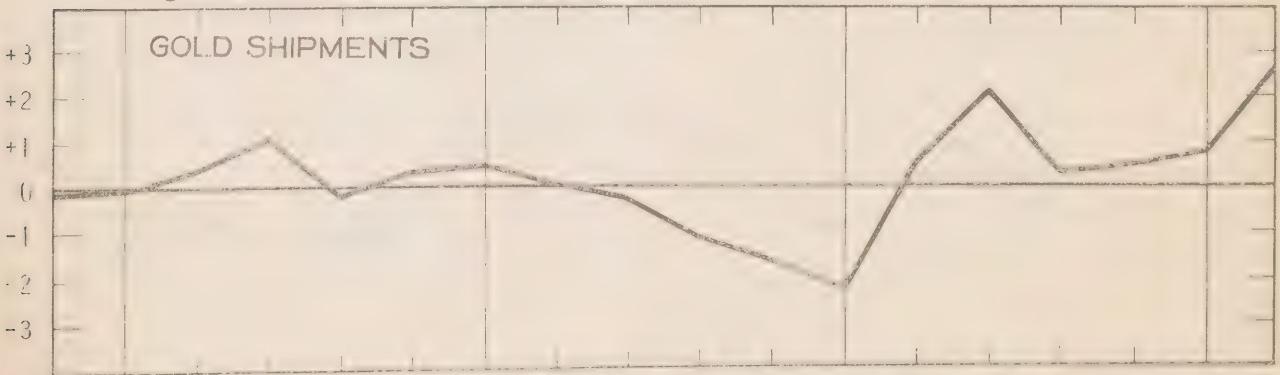
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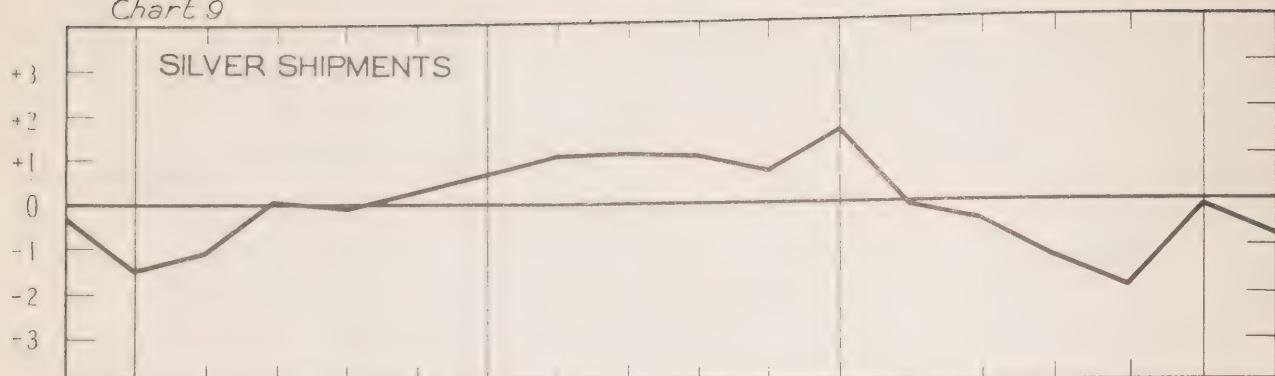


- 8



1919 1920 21 22 23 24 1925 26 27 28 29 30 31 32 33 34 1935 36

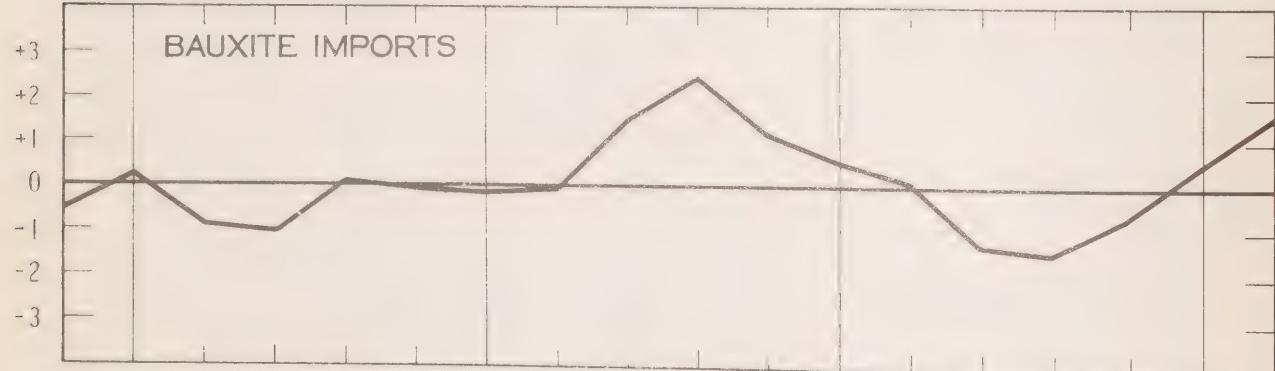
Chart 9



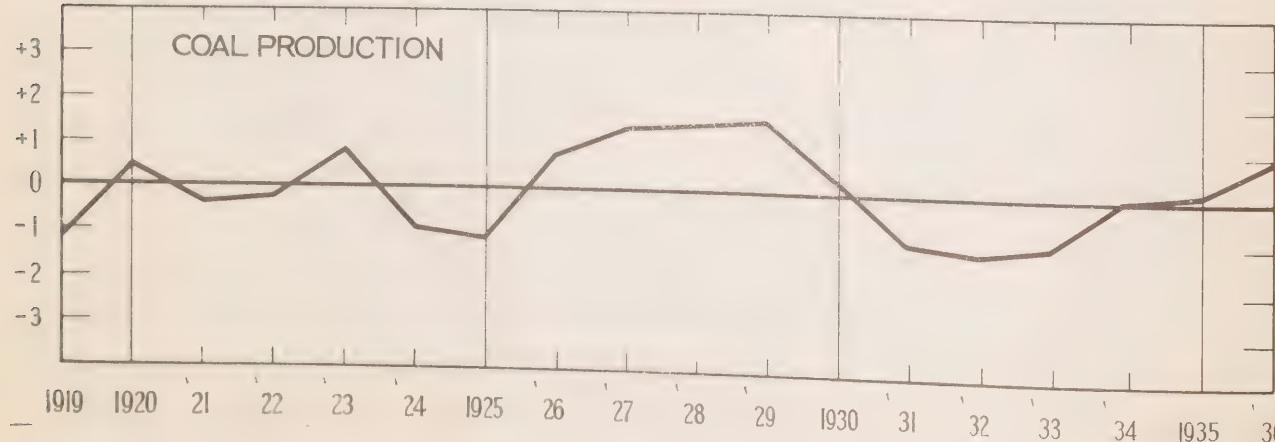
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1919 1920 21 22 23 24 1925 26 27 28 29 1930 31 32 33 34 1935 36

Chart 13

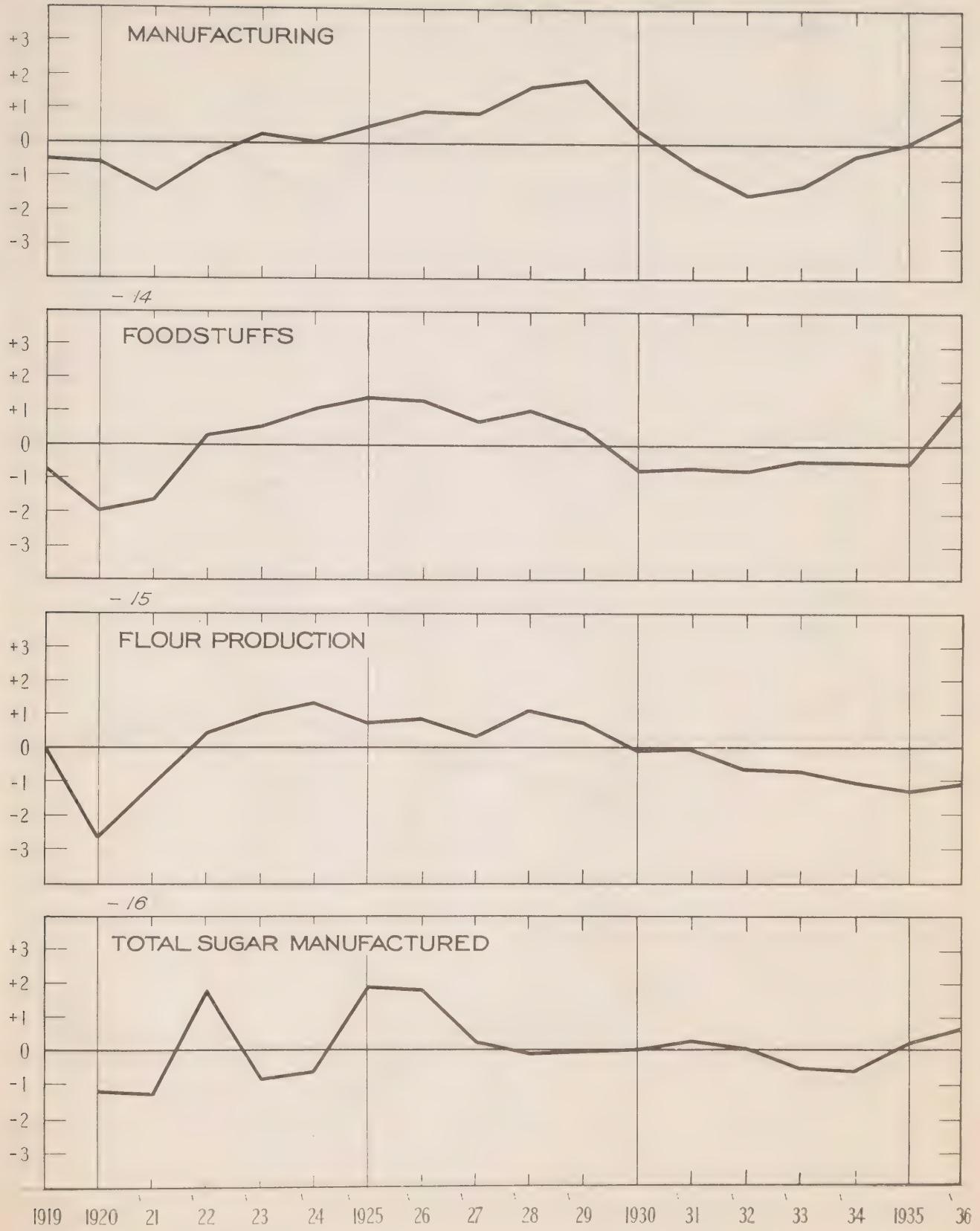


Chart 17

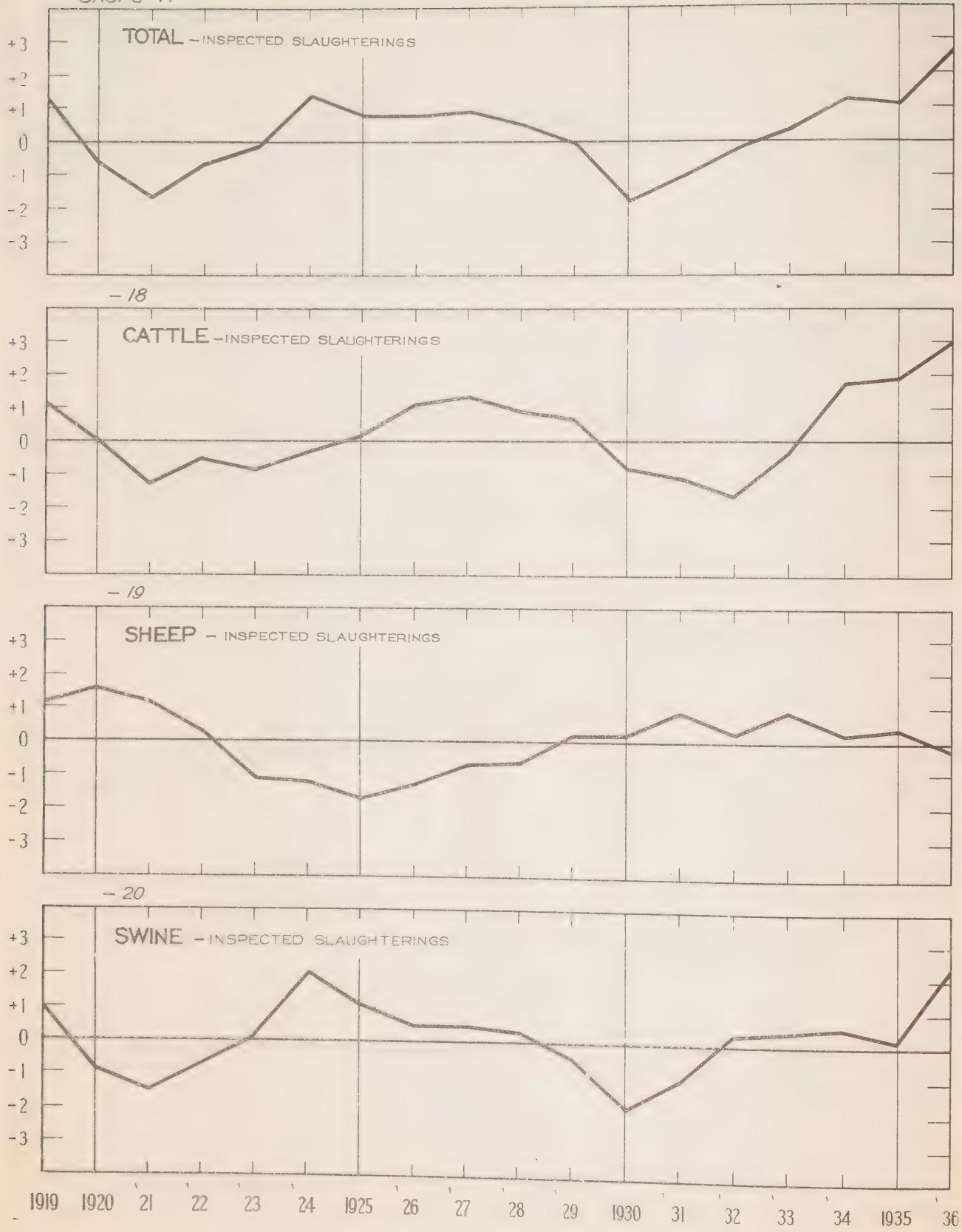
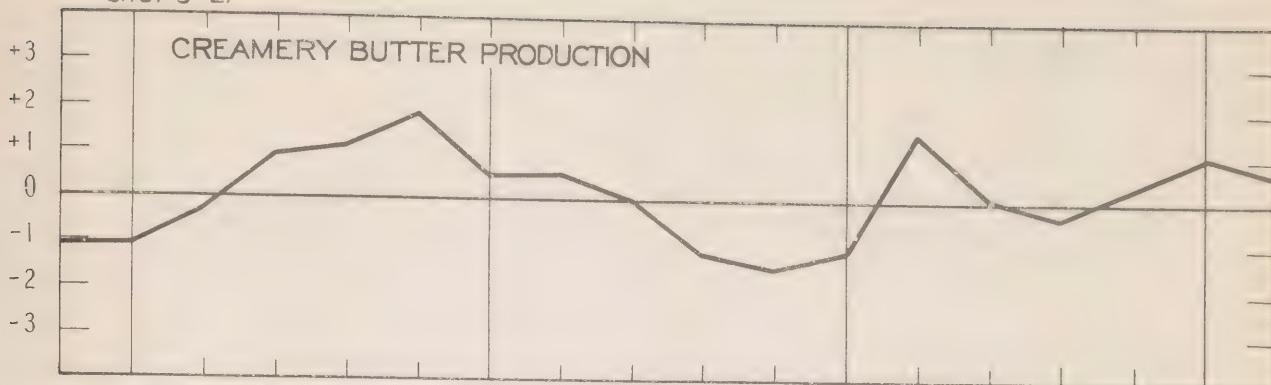
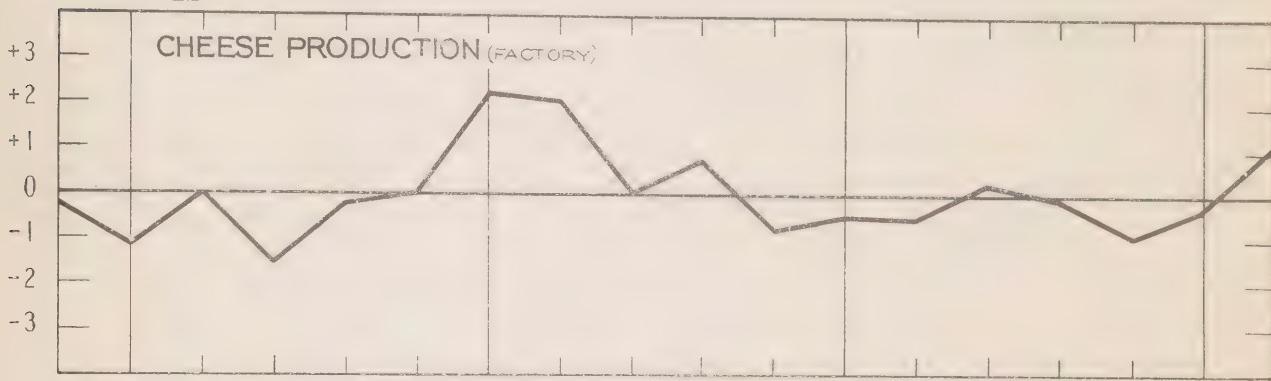


Chart 21

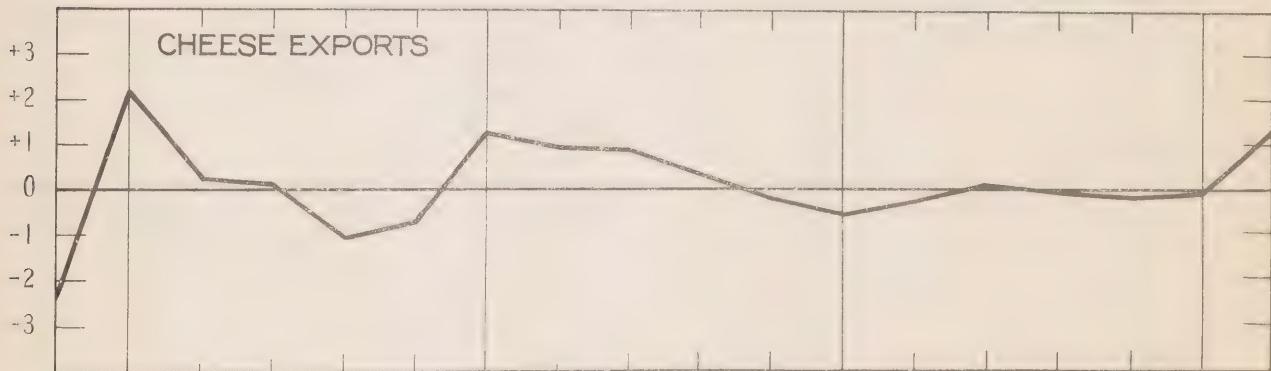
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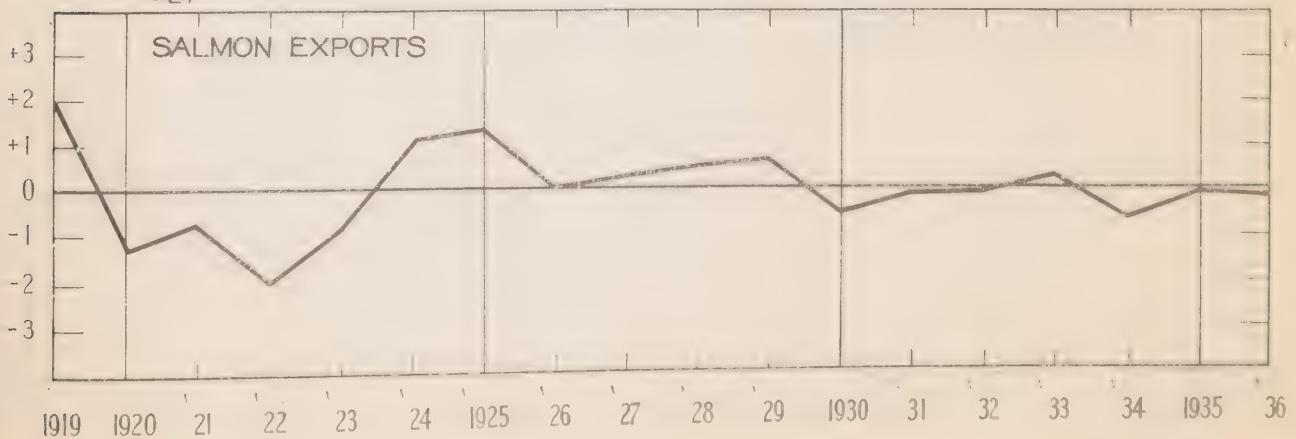
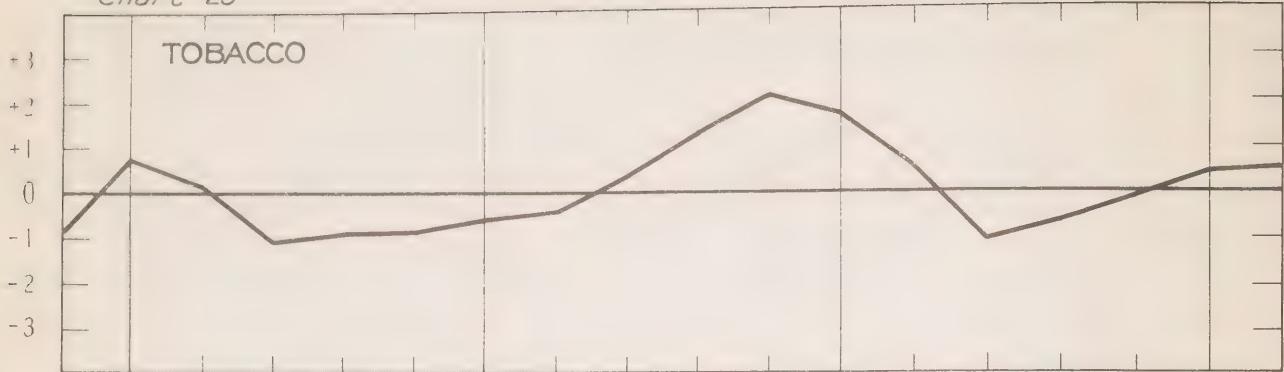
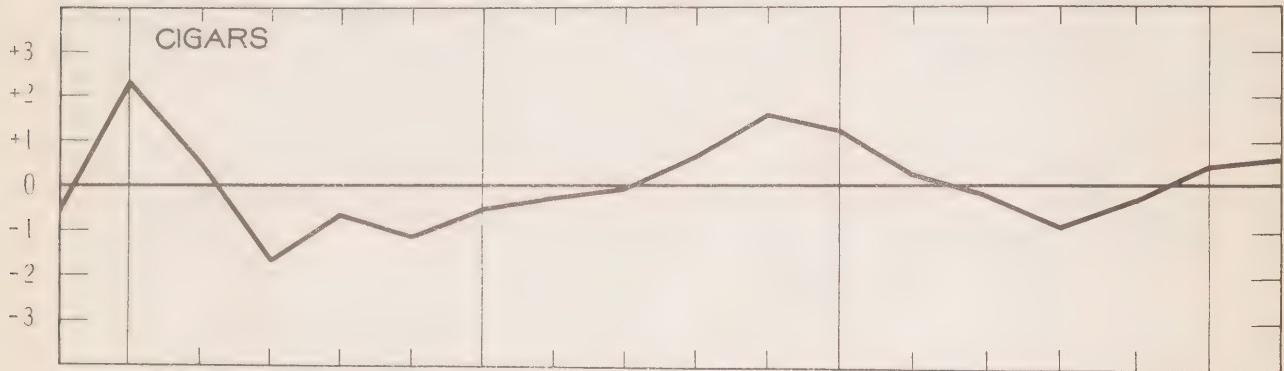


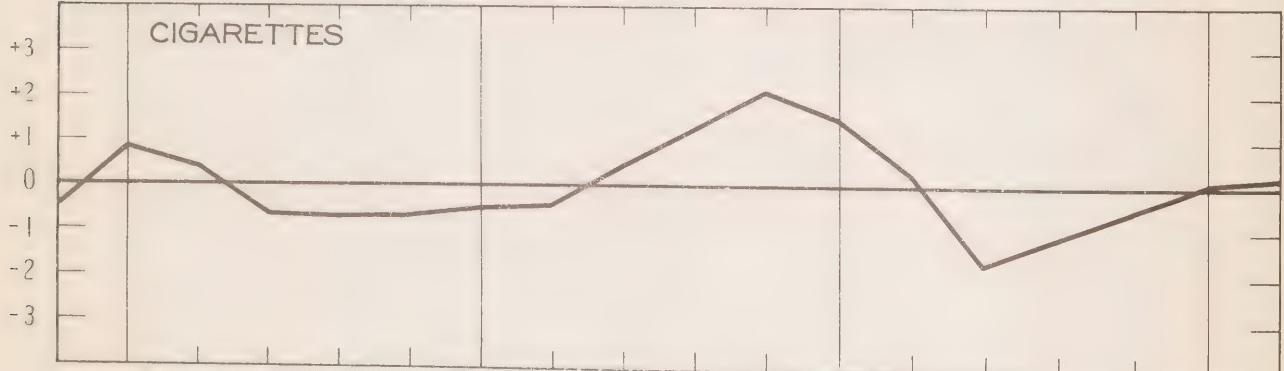
Chart 25



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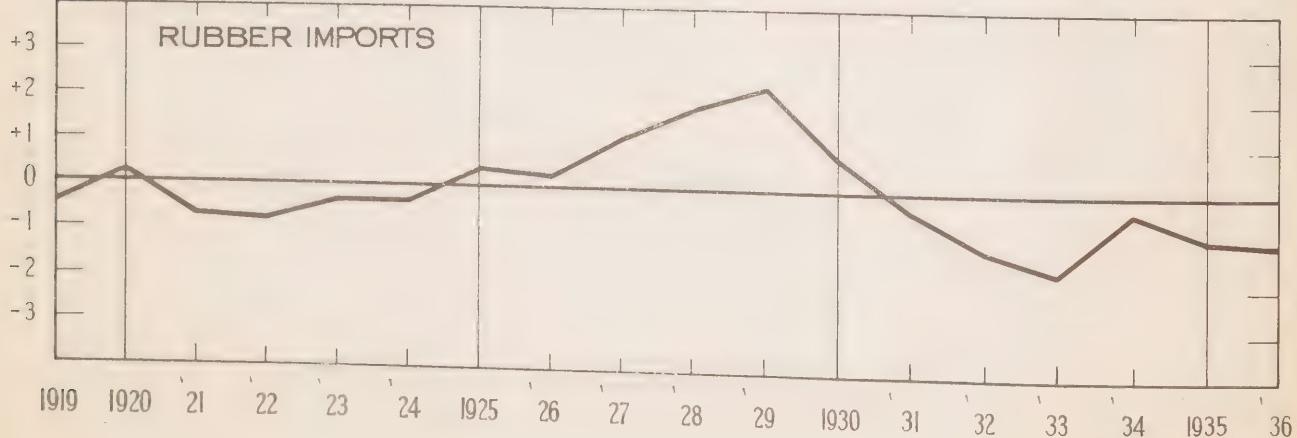
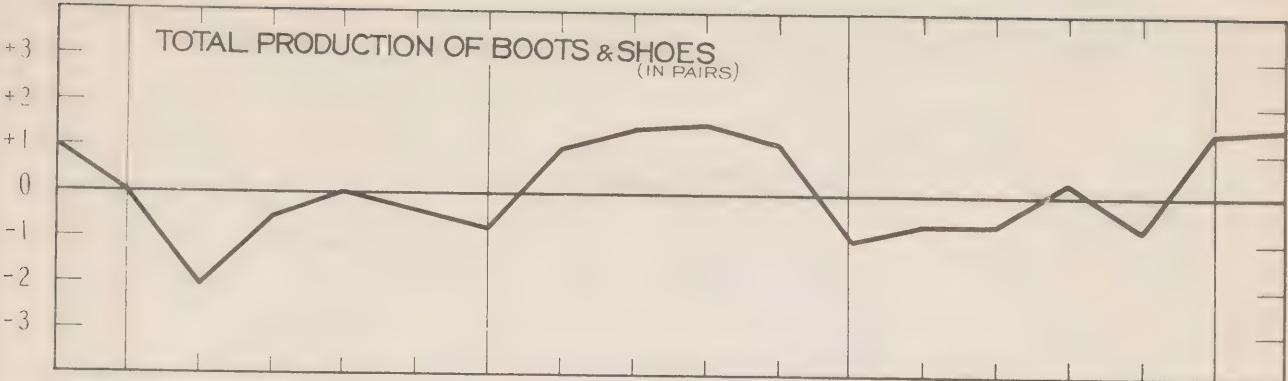
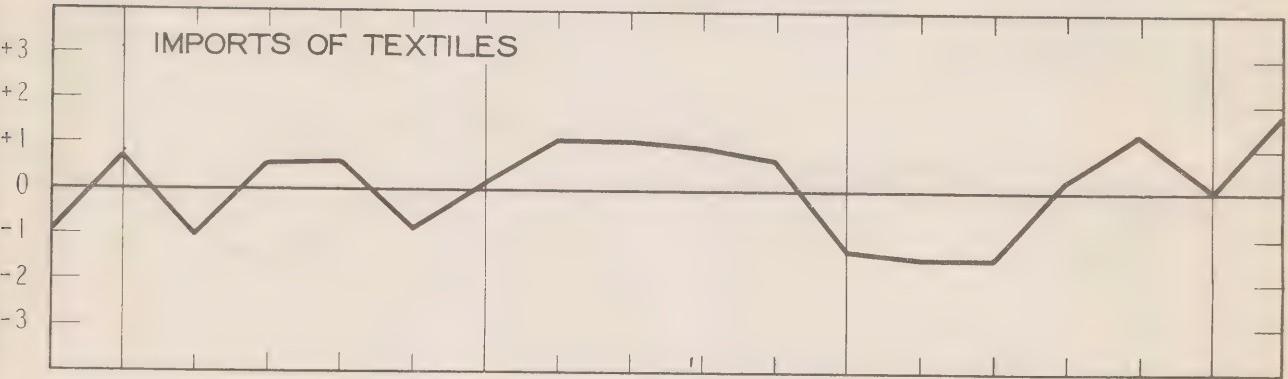


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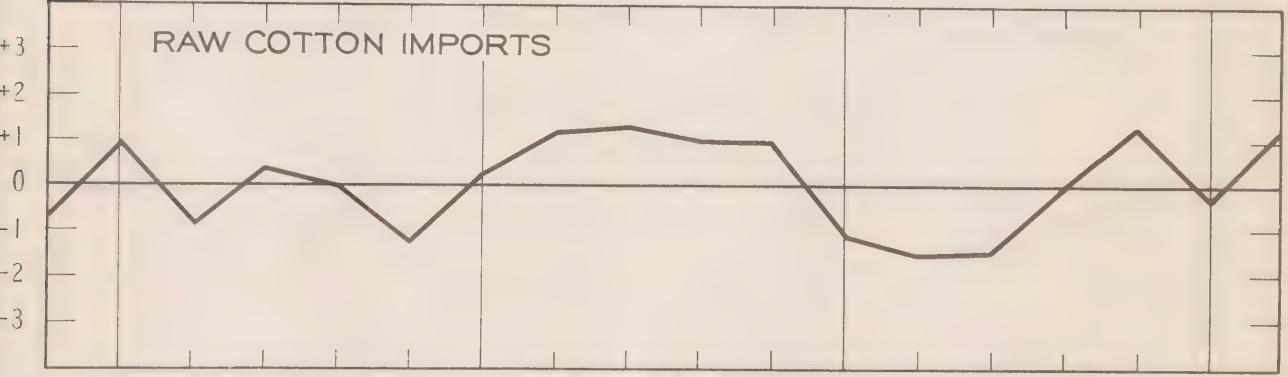
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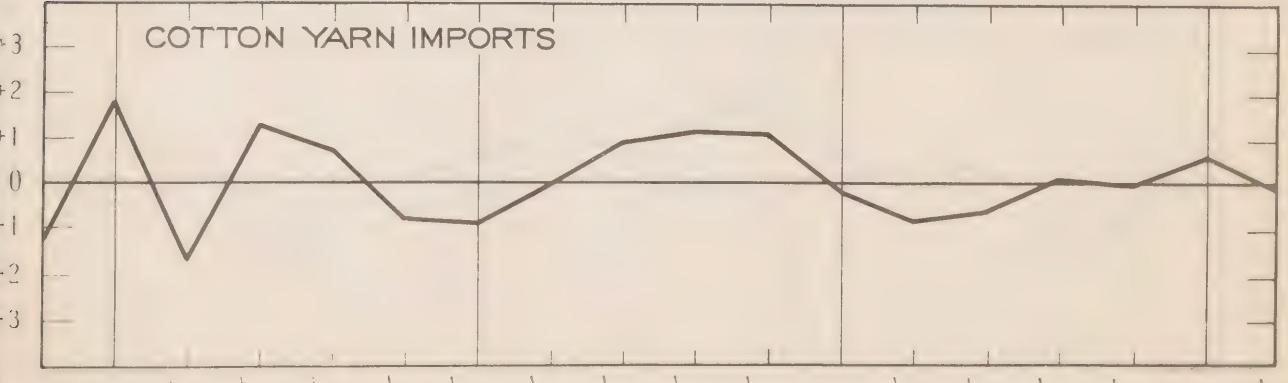
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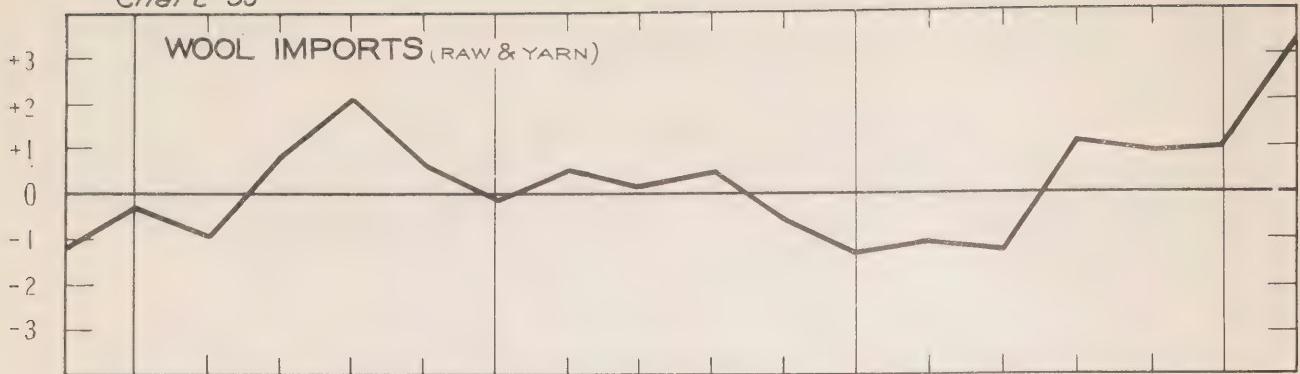


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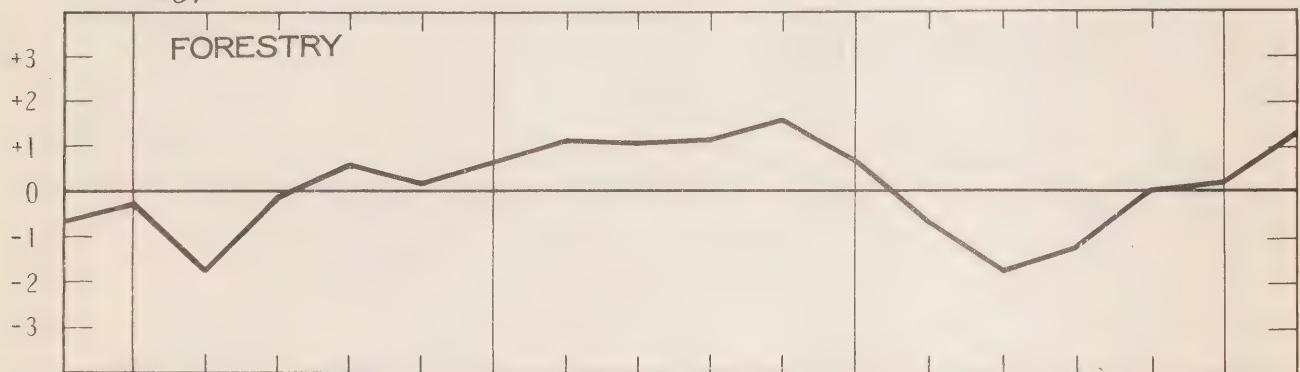


1919 1920 21 22 23 24 1925 26 27 28 29 1930 31 32 33 34 1935 36

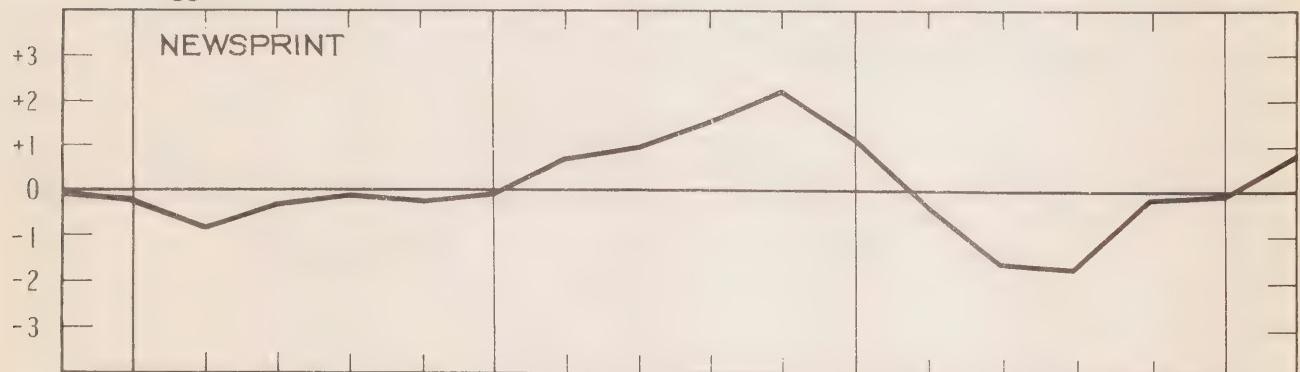
Chart 33



- 34



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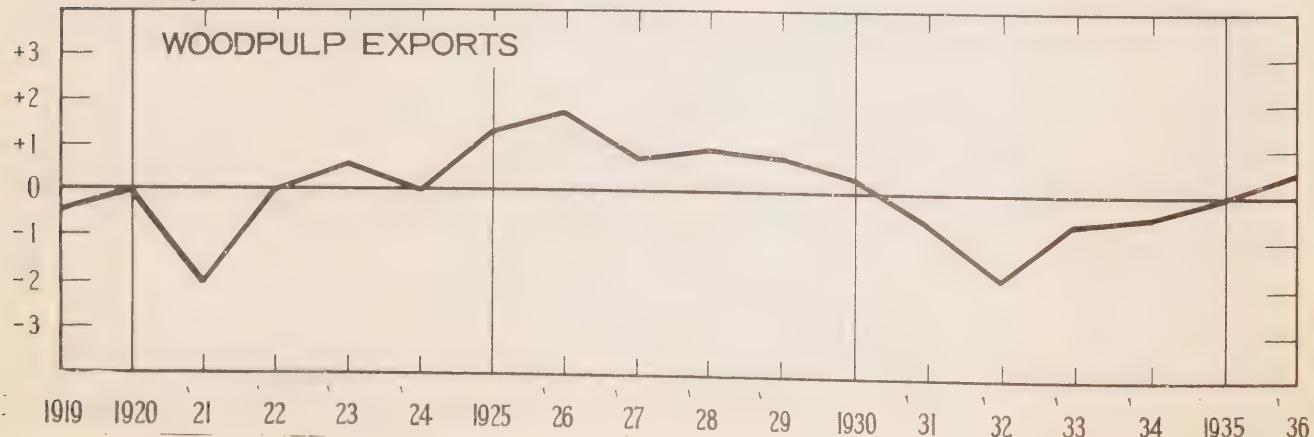
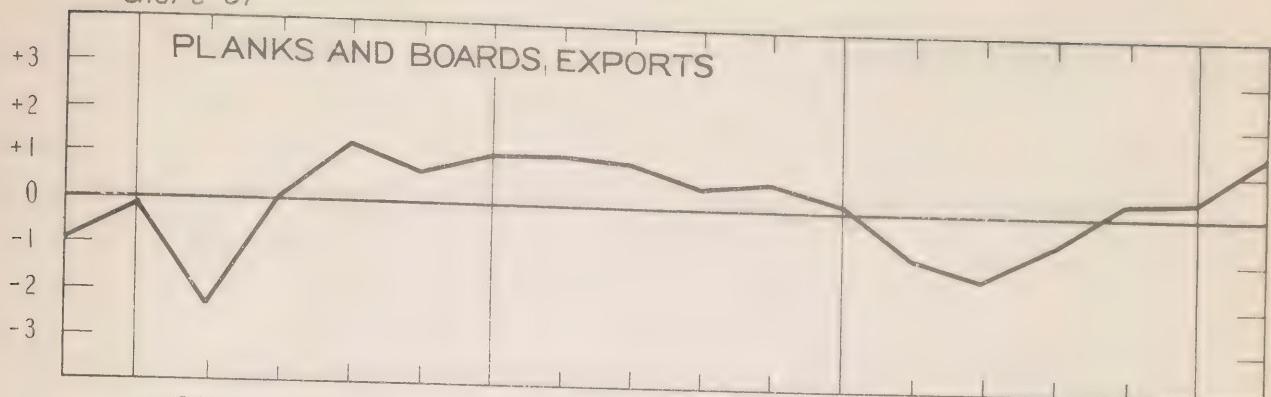
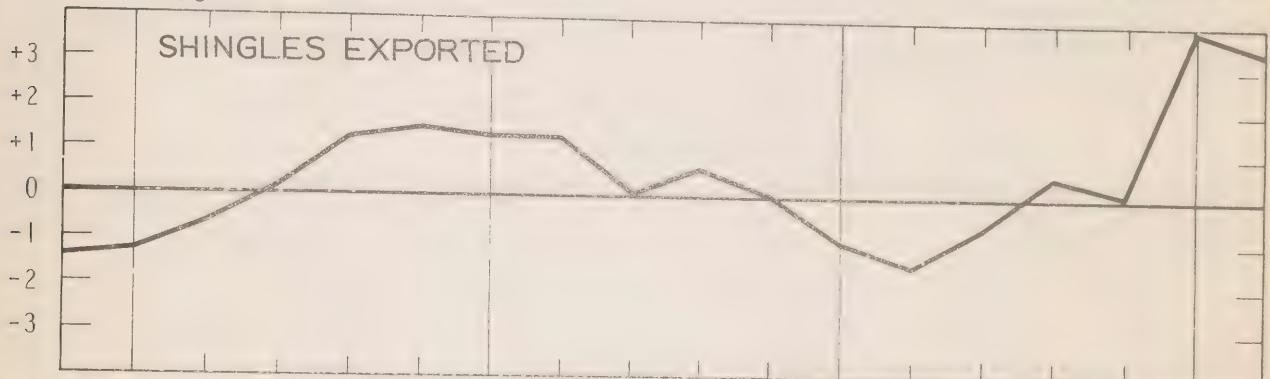


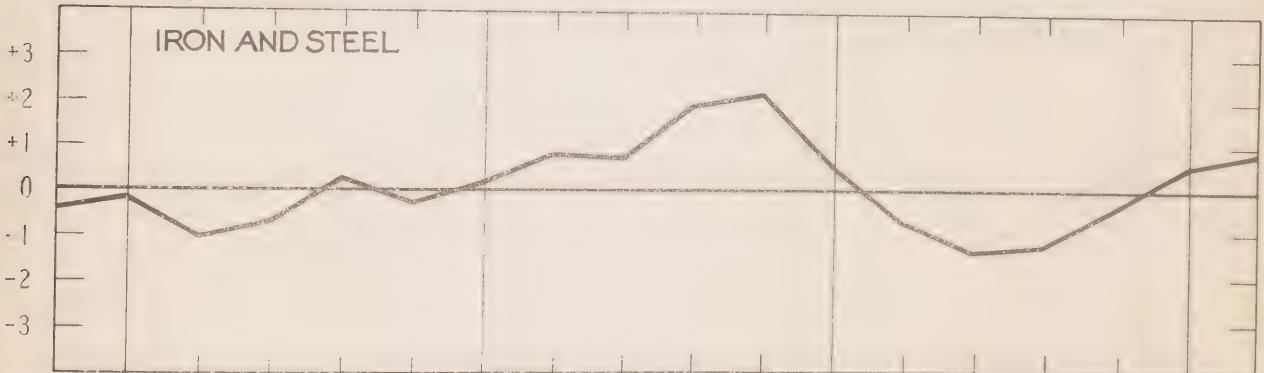
Chart 37



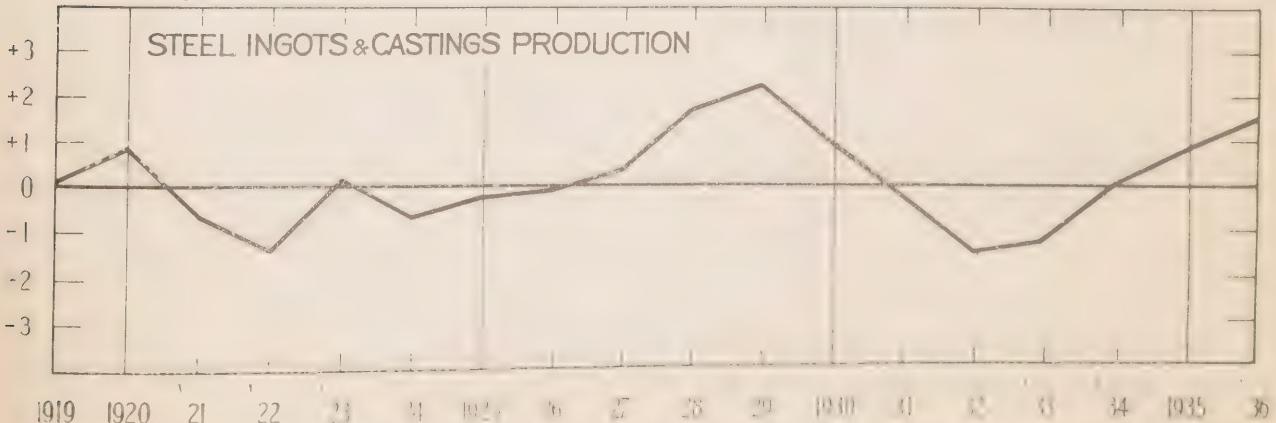
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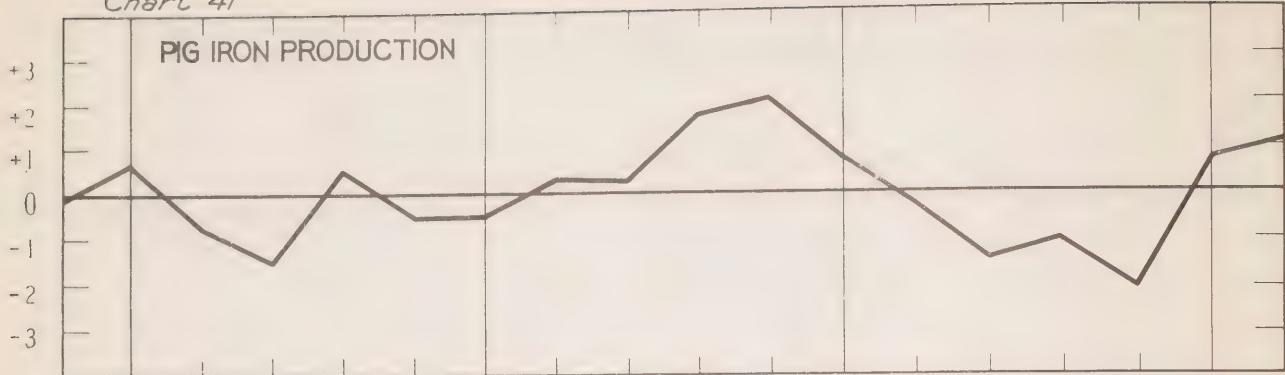


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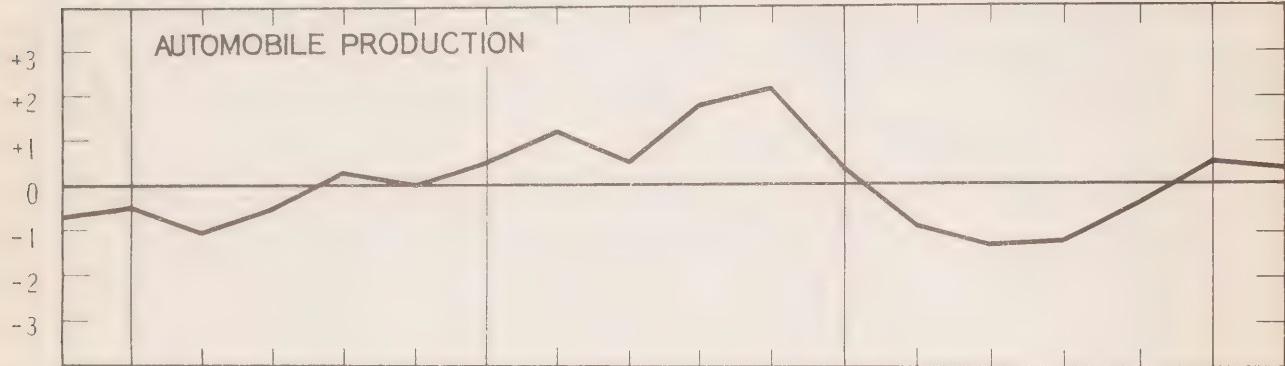


1919 1920 1921 1922 1923 1924 1925 1926 1927 1928 1929 1930 1931 1932 1933 1934 1935 1936

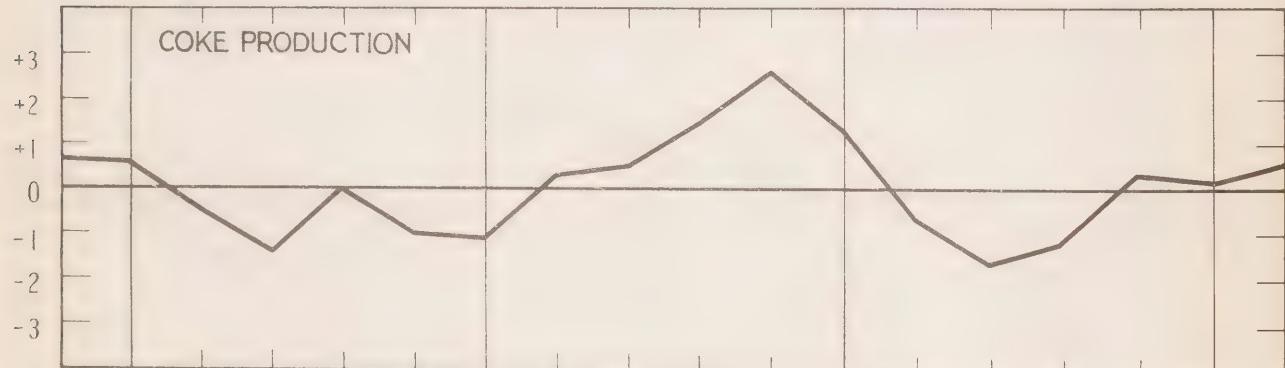
Chart 41



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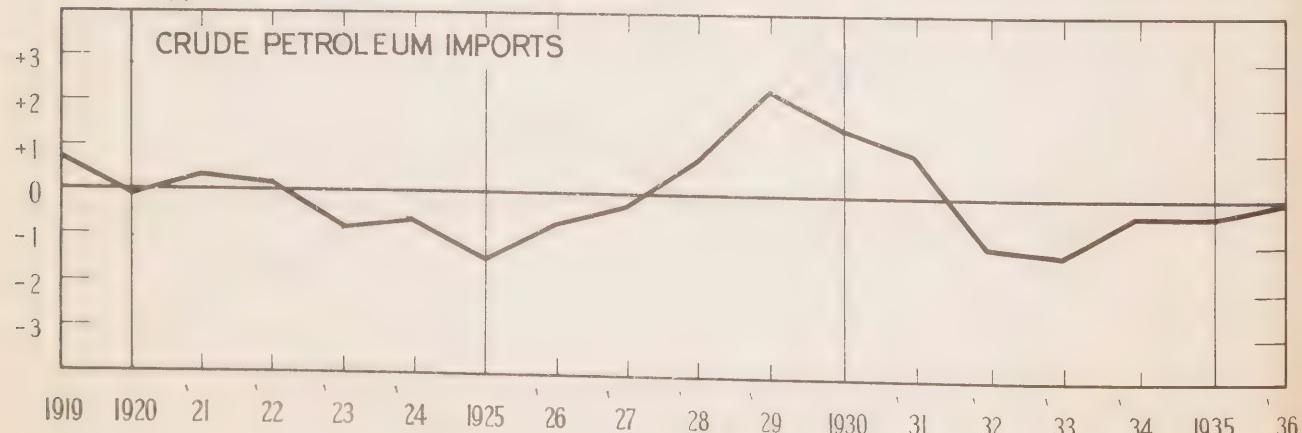
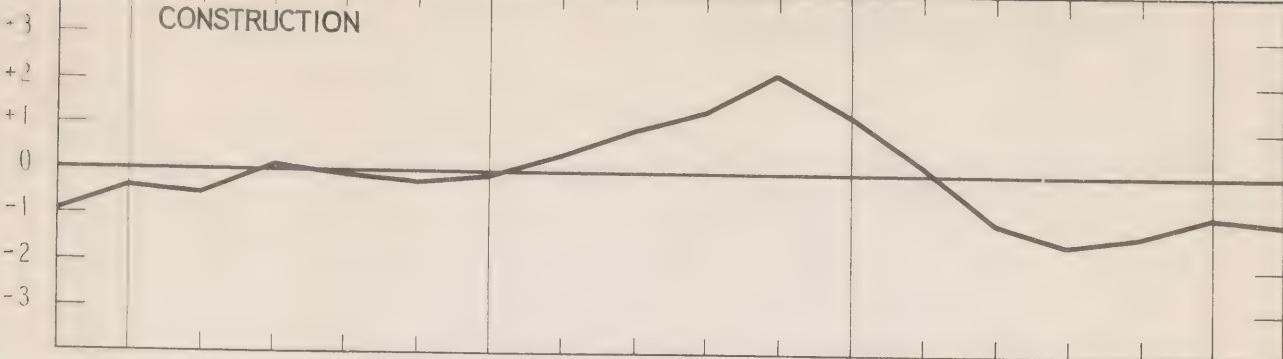
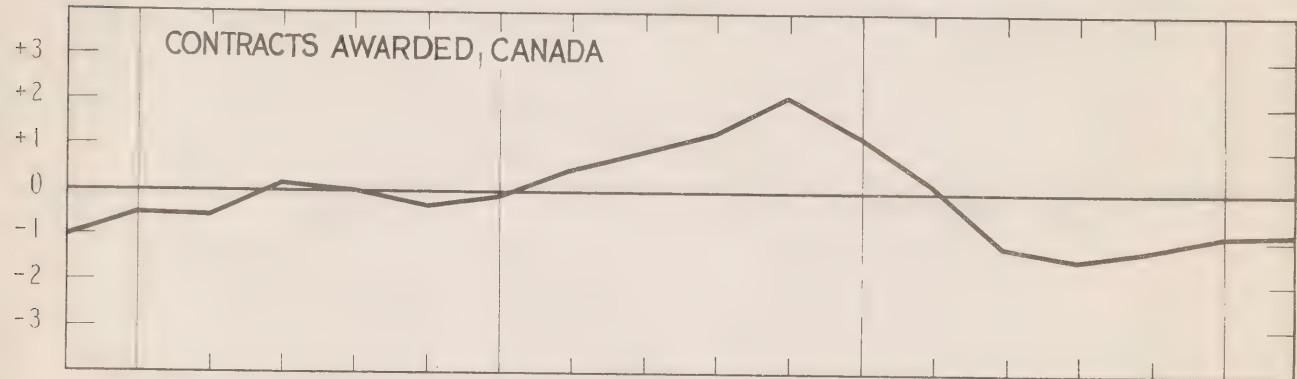


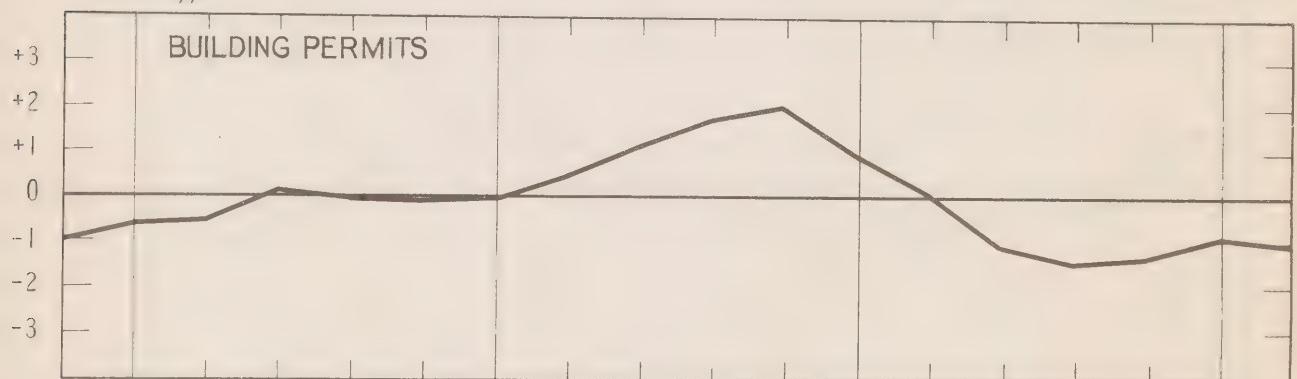
Chart 45

CONSTRUCTION

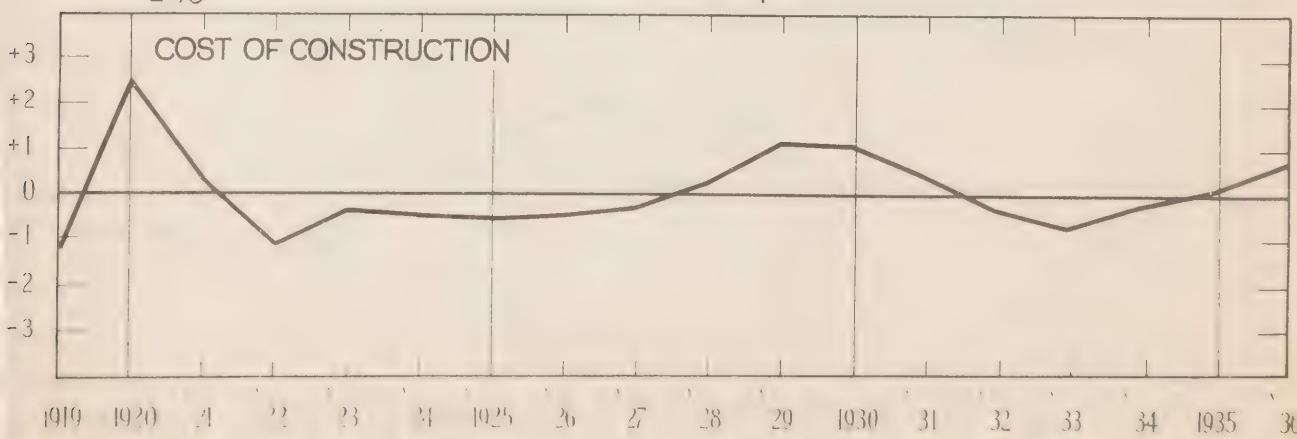
- 46

CONTRACTS AWARDED, CANADA

- 47

BUILDING PERMITS

- 48

COST OF CONSTRUCTION

1919 1920 21 22 23 24 1925 26 27 28 29 1930 31 32 33 34 1935 36

Chart 49

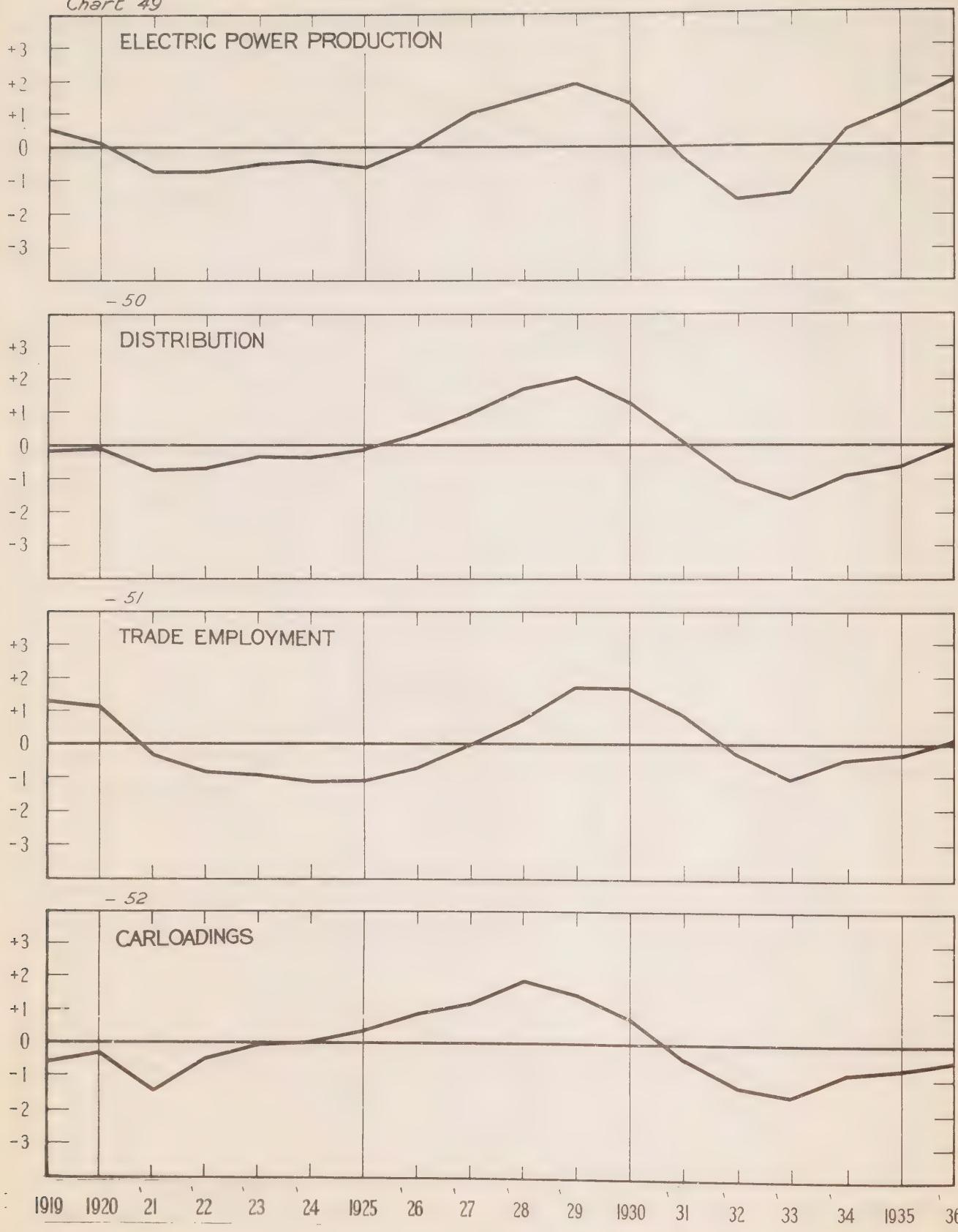
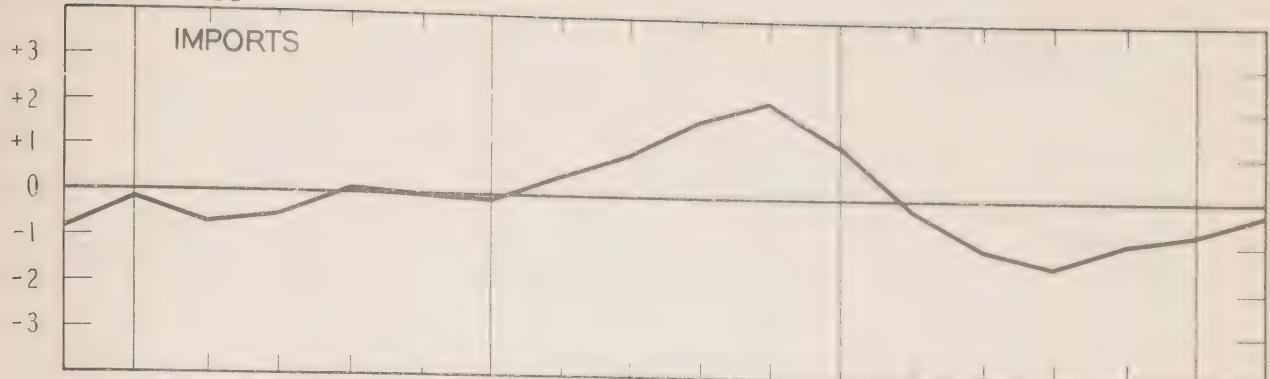
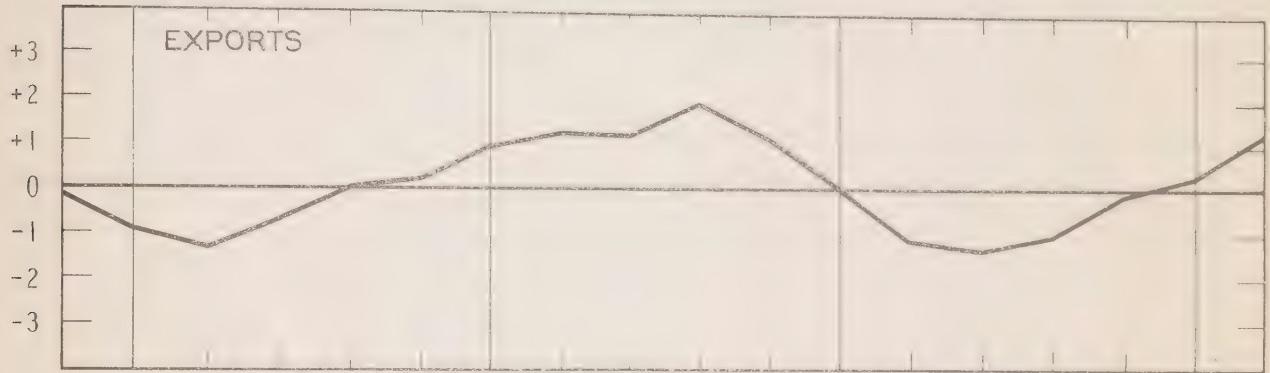


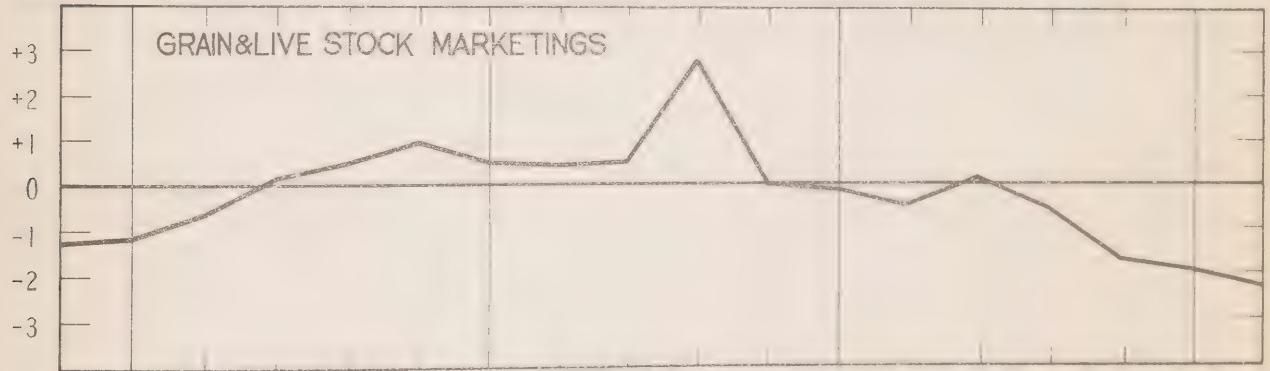
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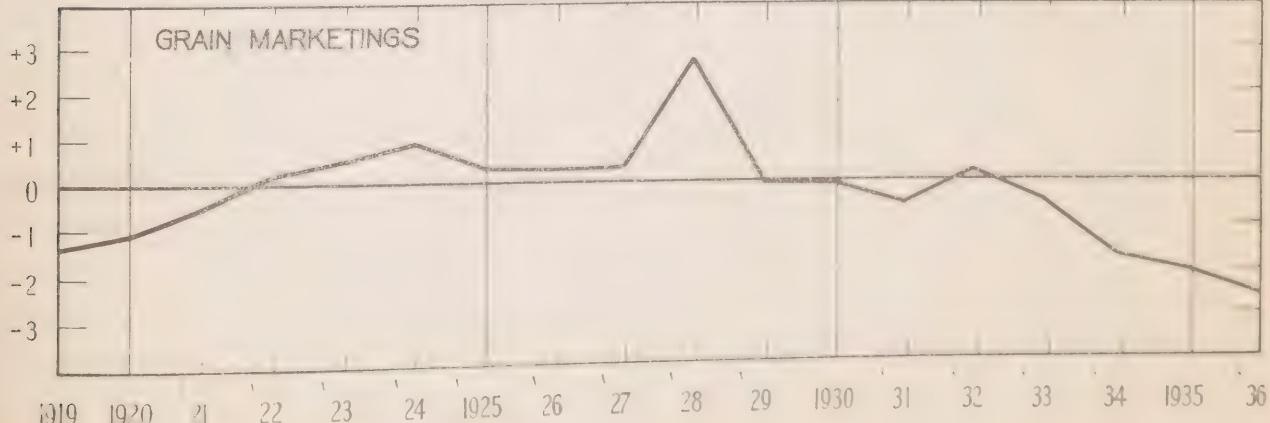
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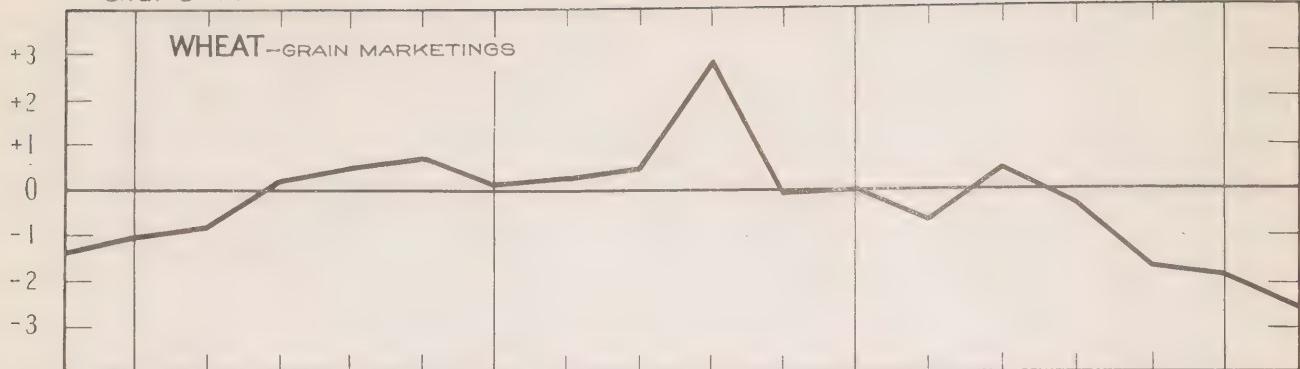


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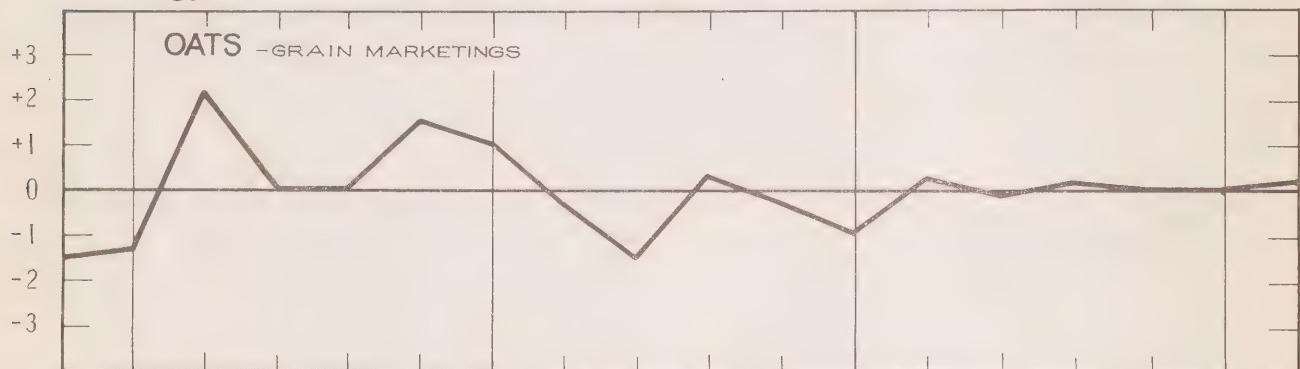


1919 1920 21 22 23 24 1925 26 27 28 29 1930 31 32 33 34 1935 36

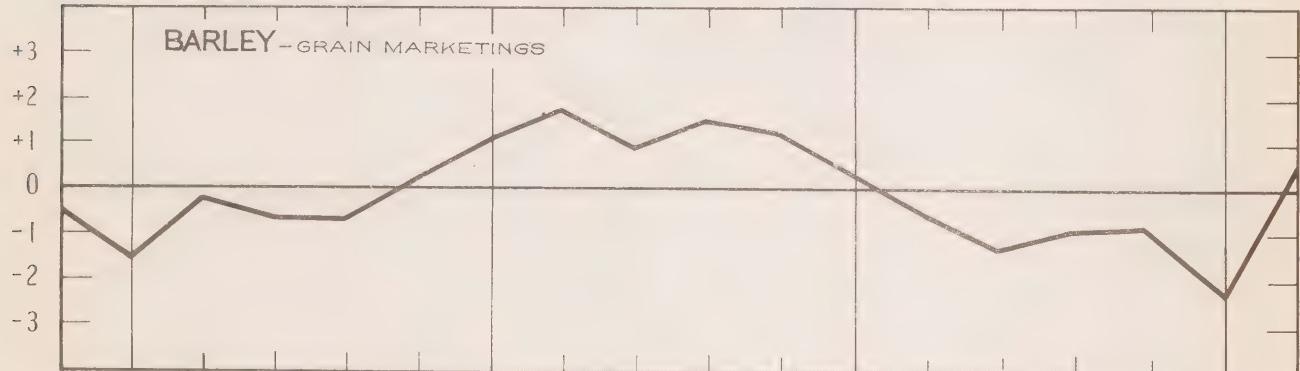
Chart 57



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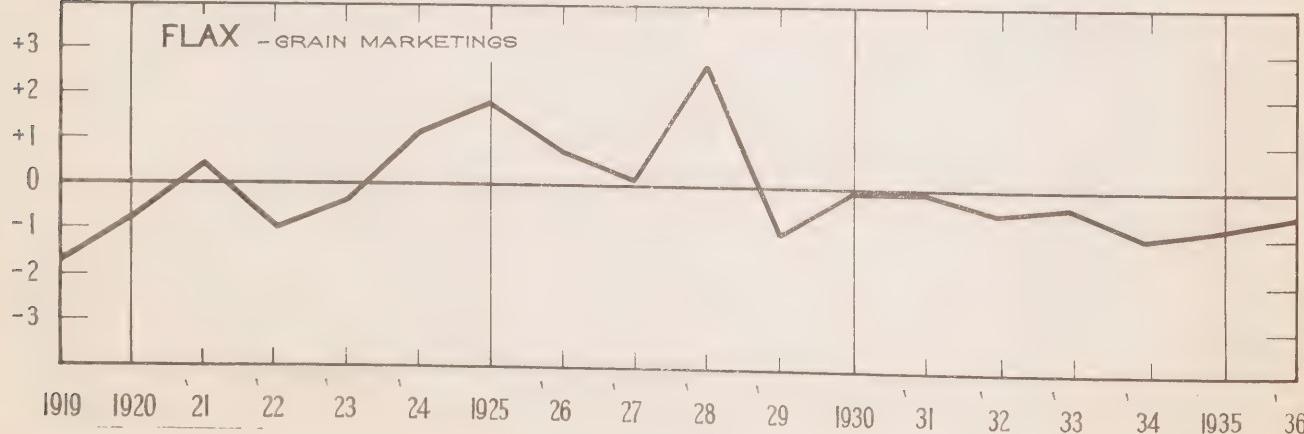


Chart 61

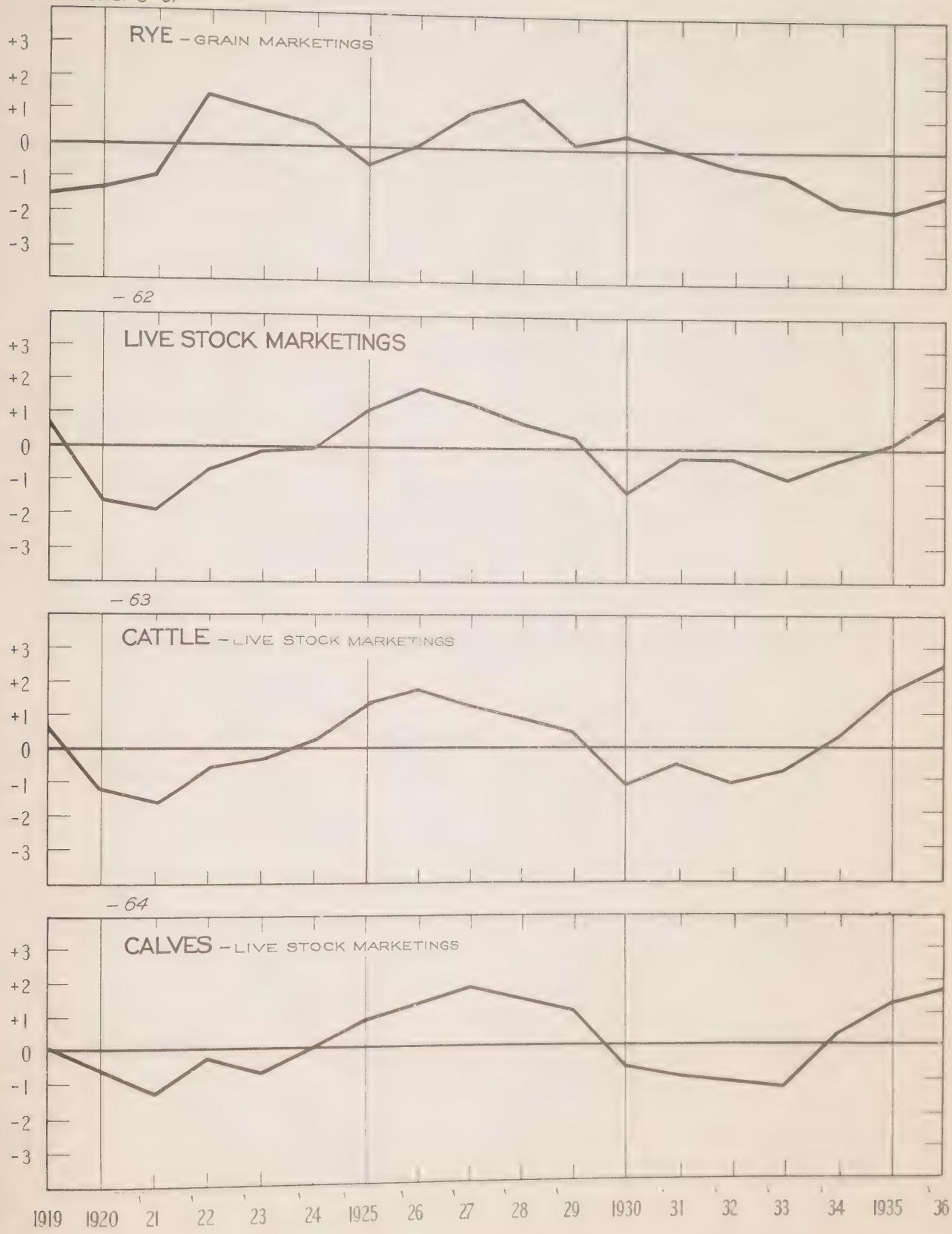
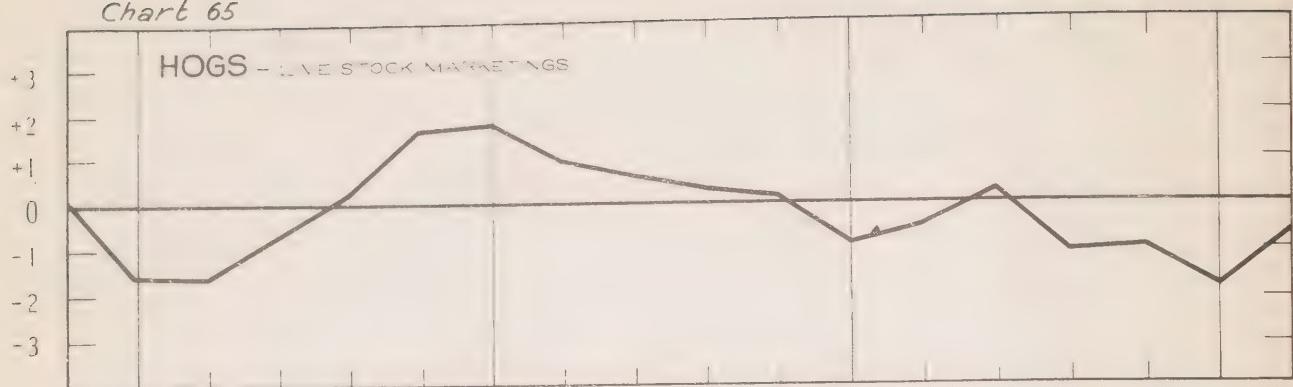
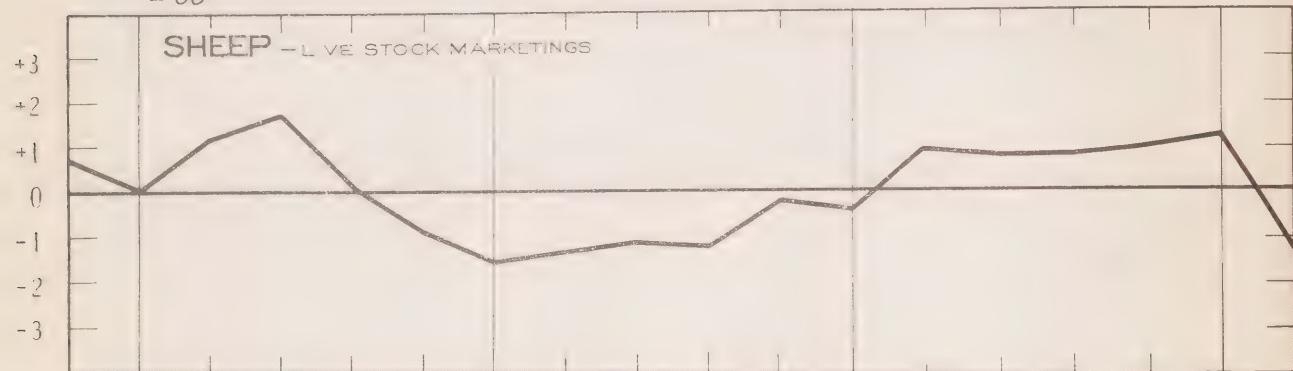


Chart 65



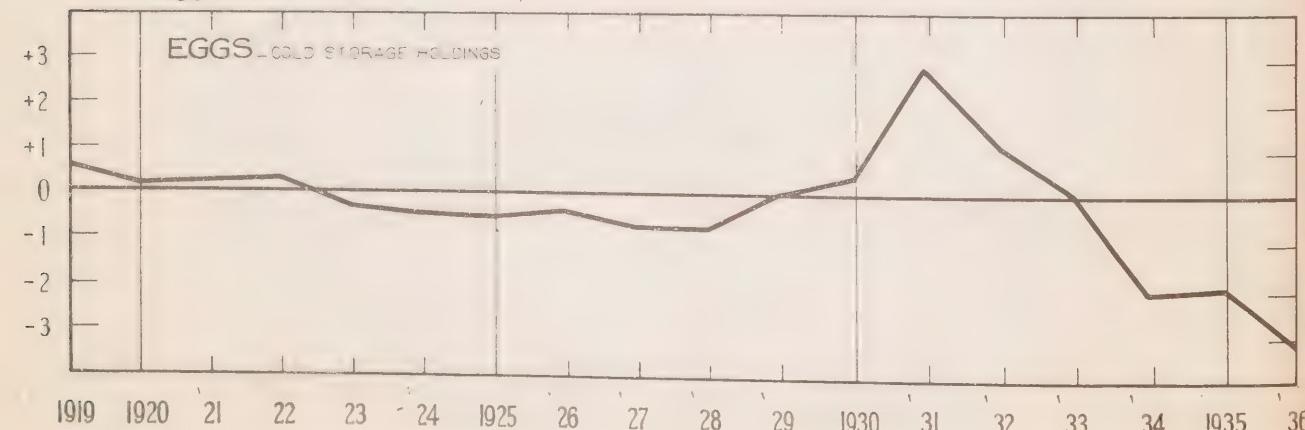
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1919 1920 21 22 23 24 1925 26 27 28 29 1930 31 32 33 34 1935 36

Chart 69

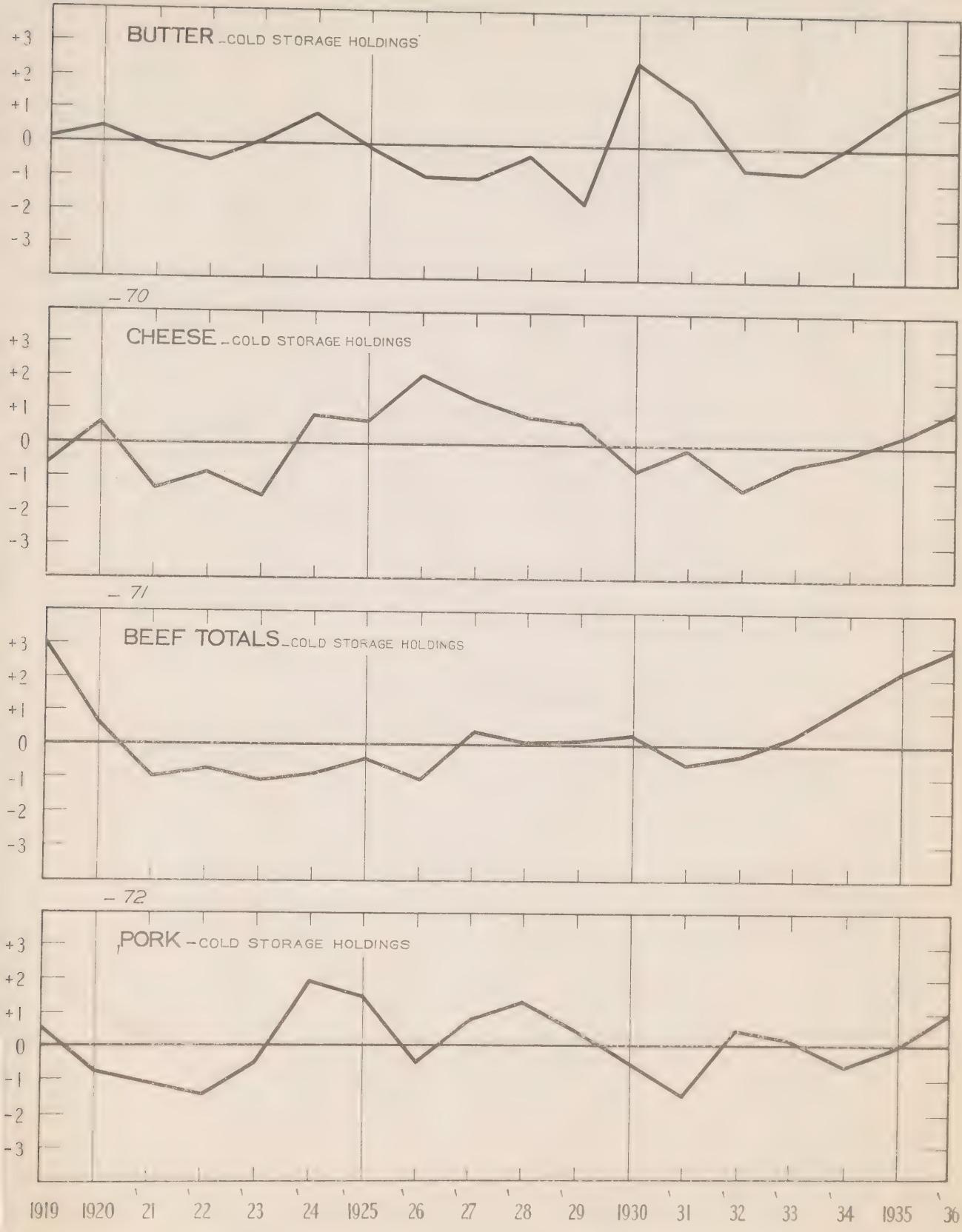
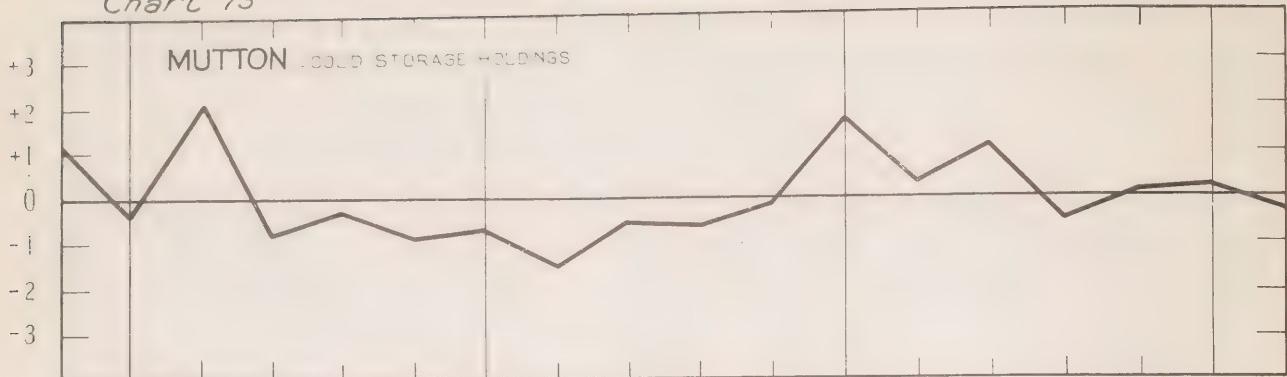
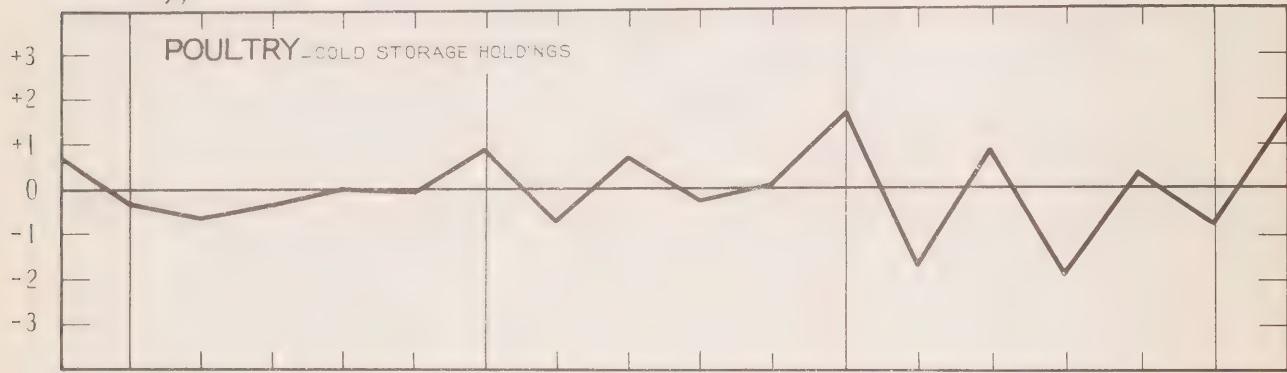


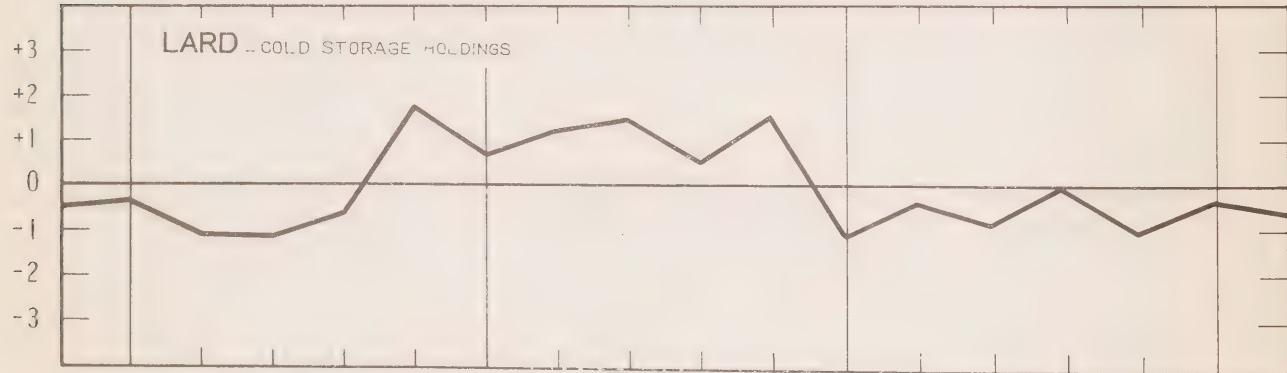
Chart 73



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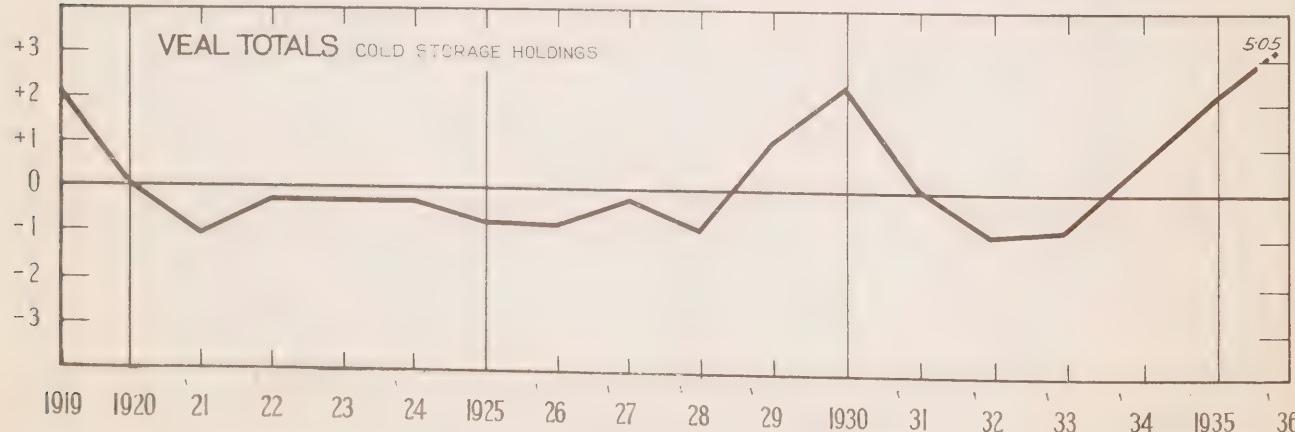
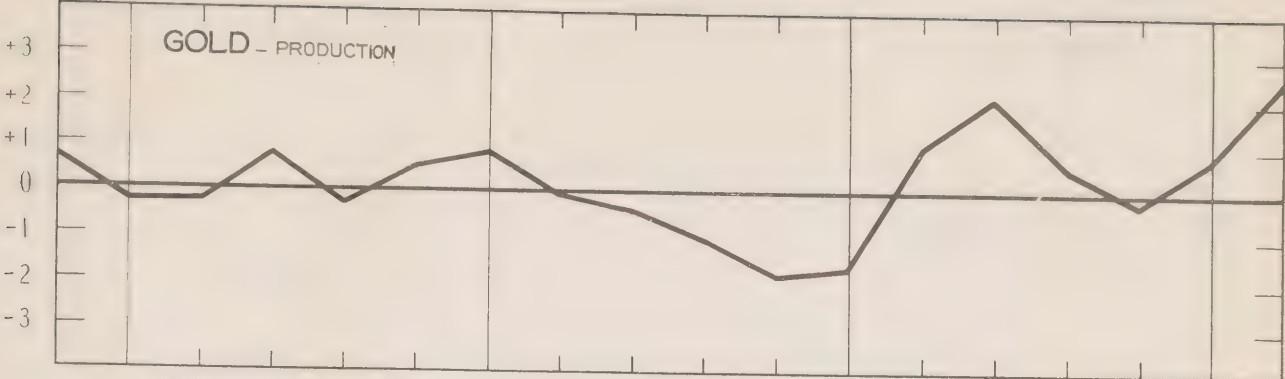
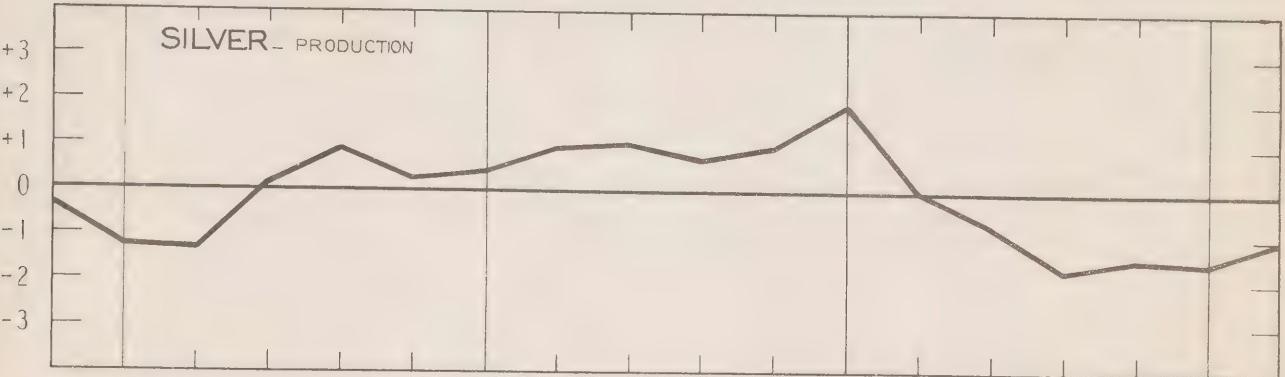


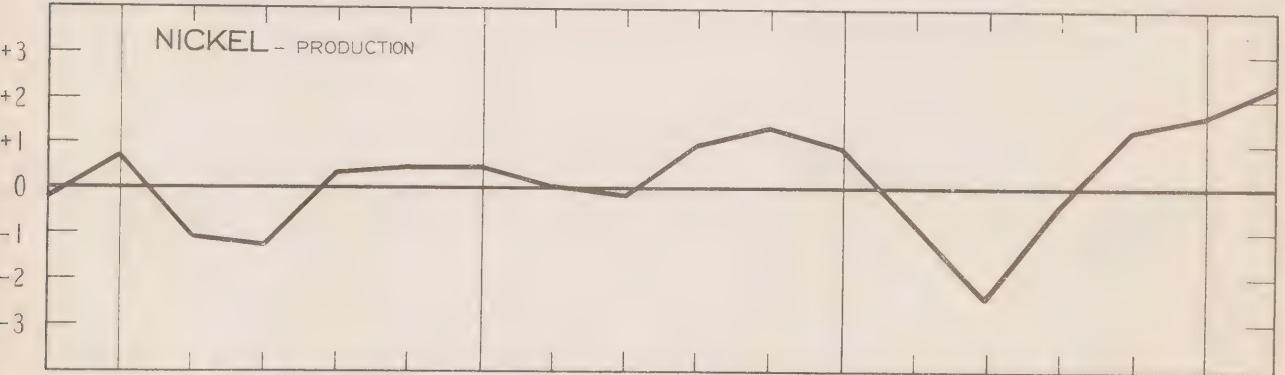
Chart 77



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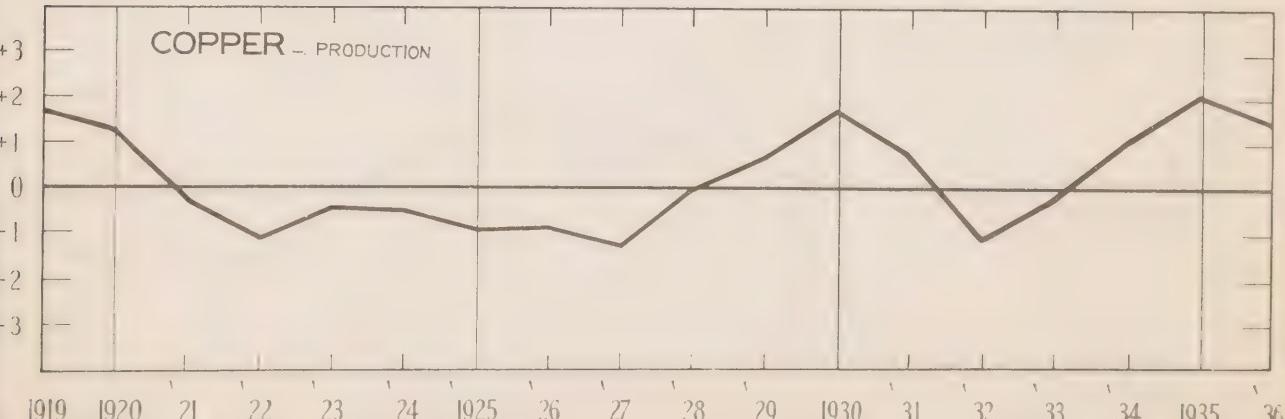


Chart 81

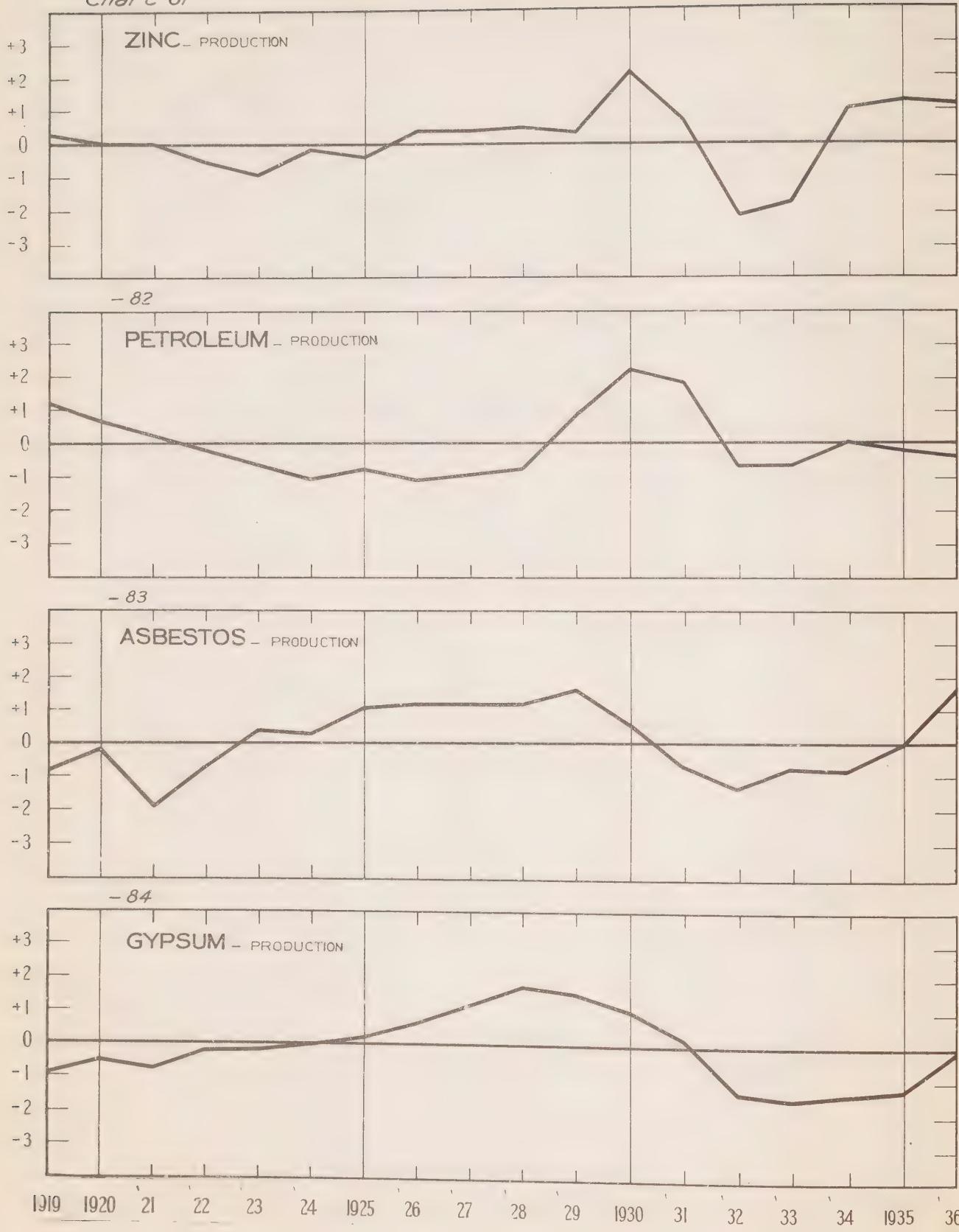
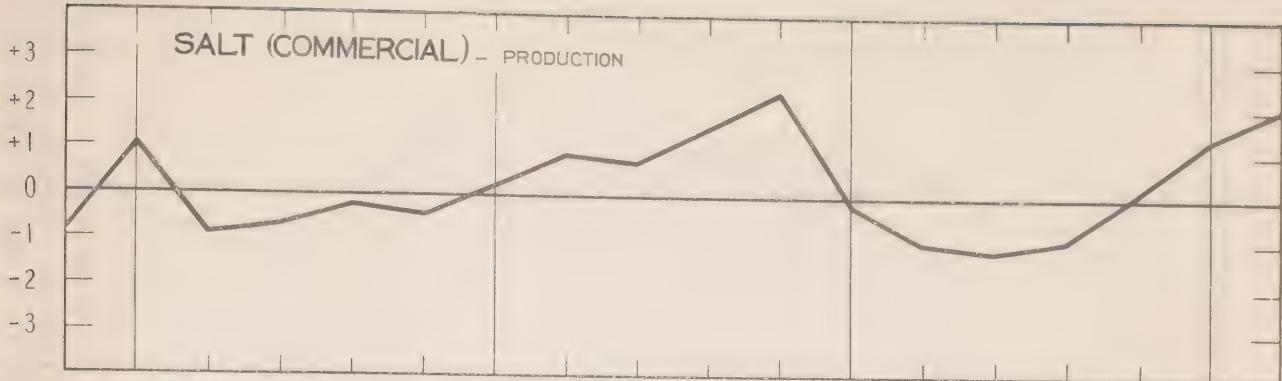
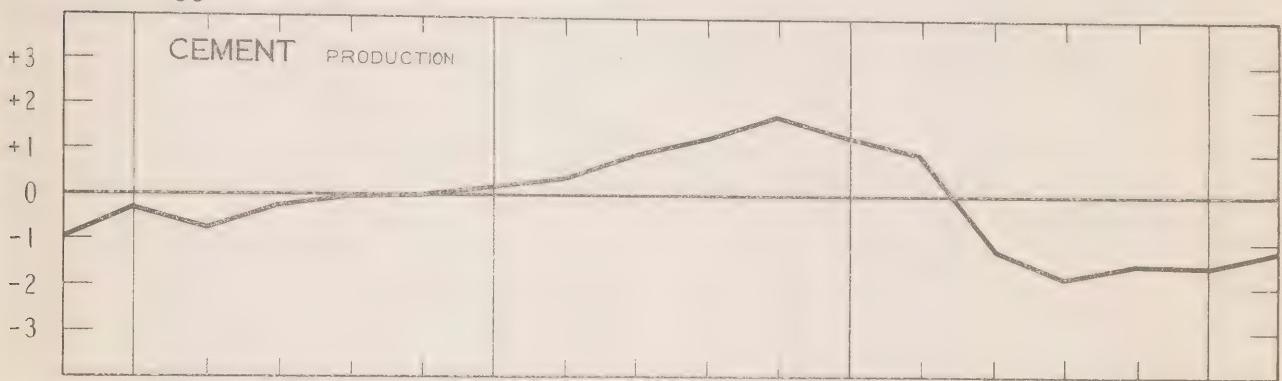


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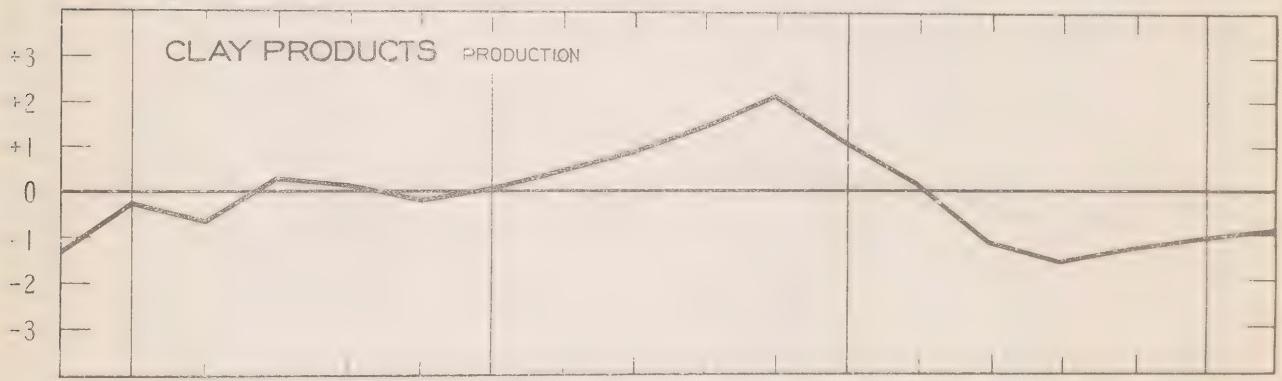
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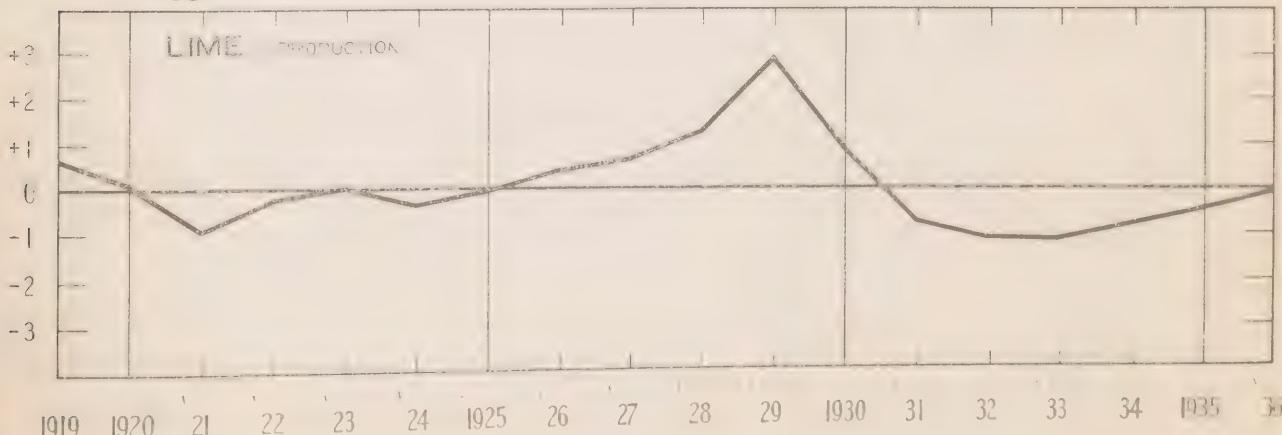
- 86



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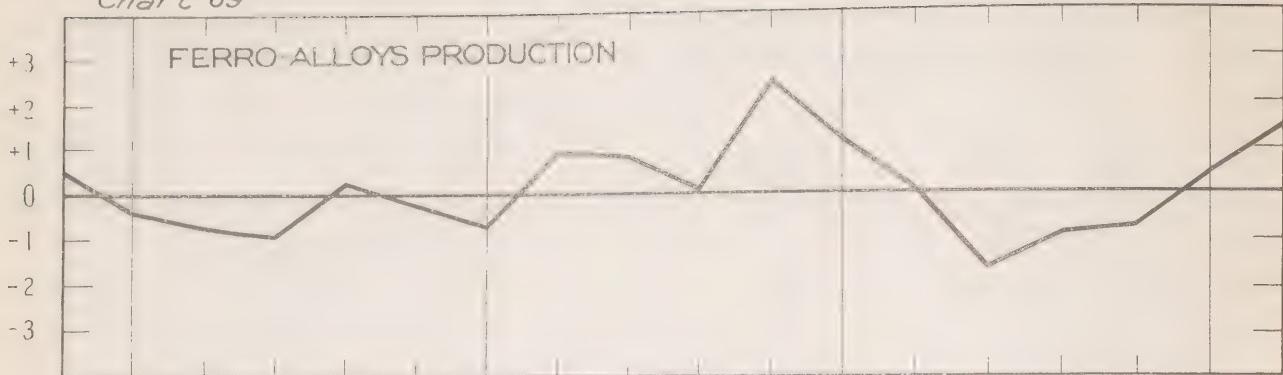


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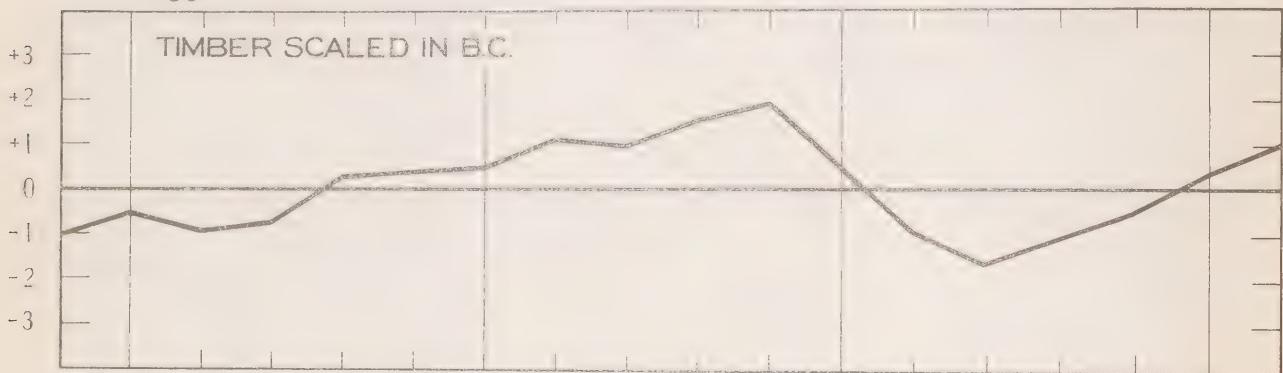


1919 1920 1921 1922 1923 1924 1925 1926 1927 1928 1929 1930 1931 1932 1933 1934 1935 1936

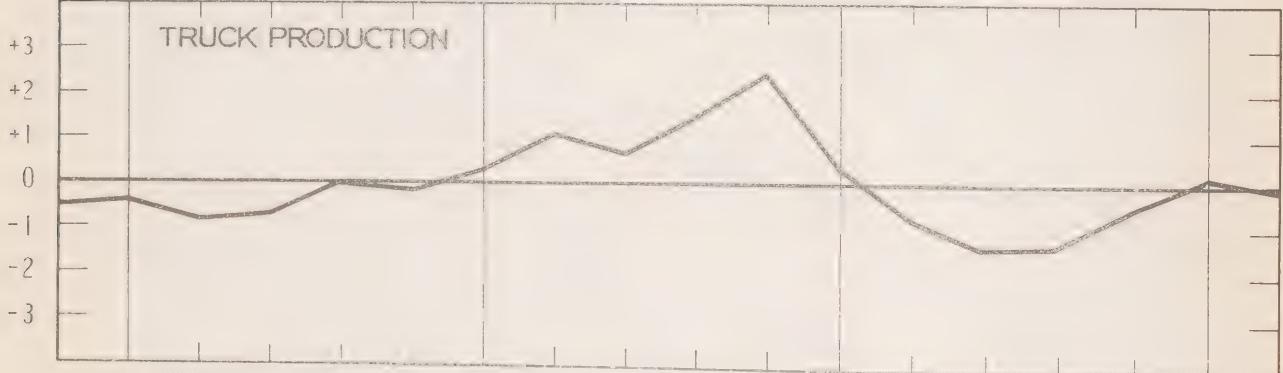
Chart 89



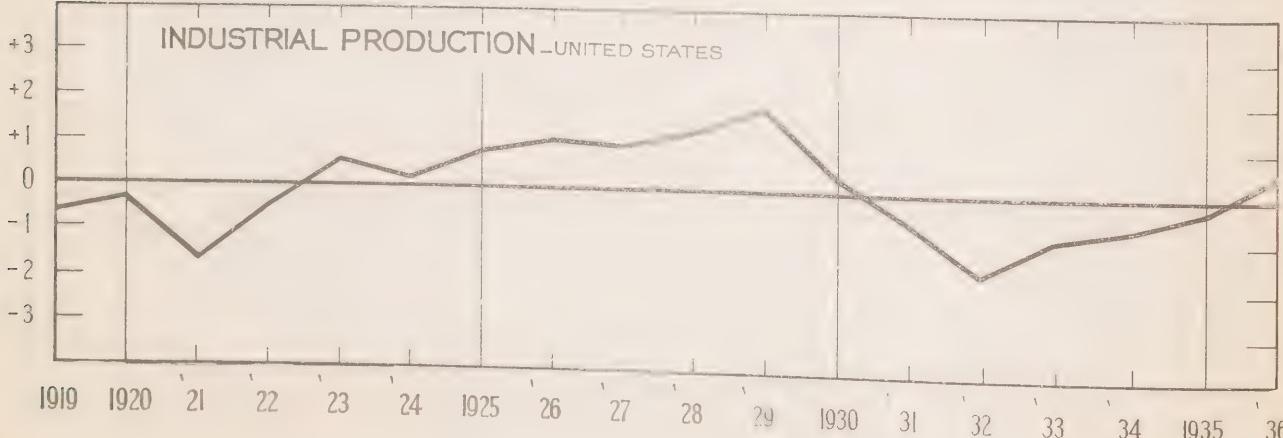
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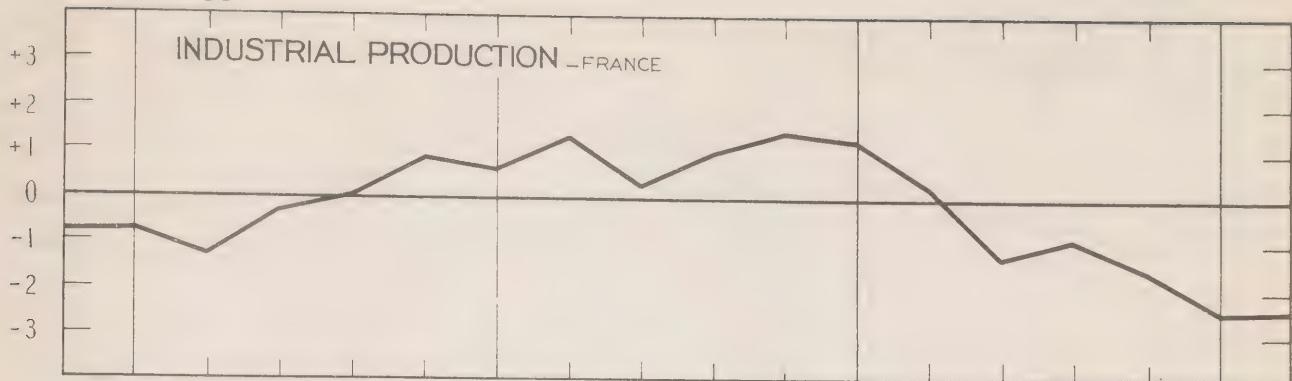
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1919 1920 21 22 23 24 1925 26 27 28 29 1930 31 32 33 34 1935 36

Chart 93

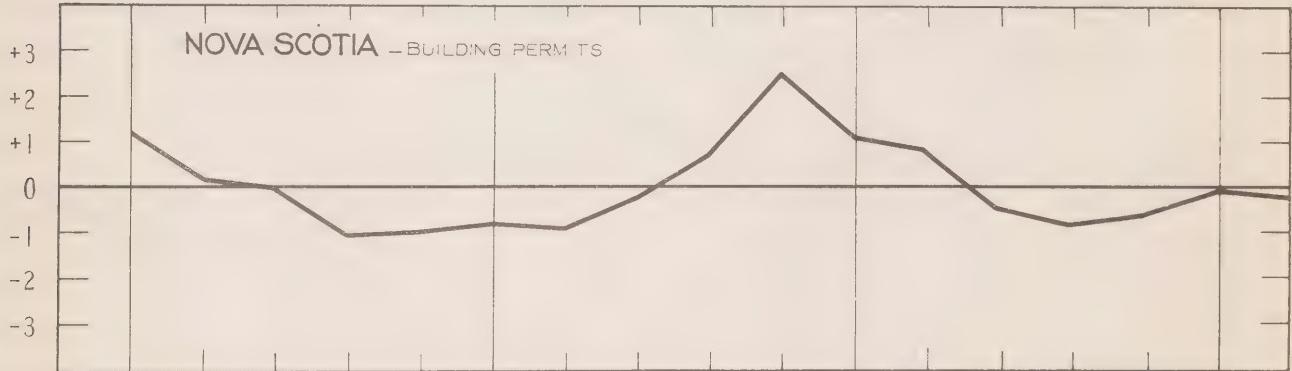
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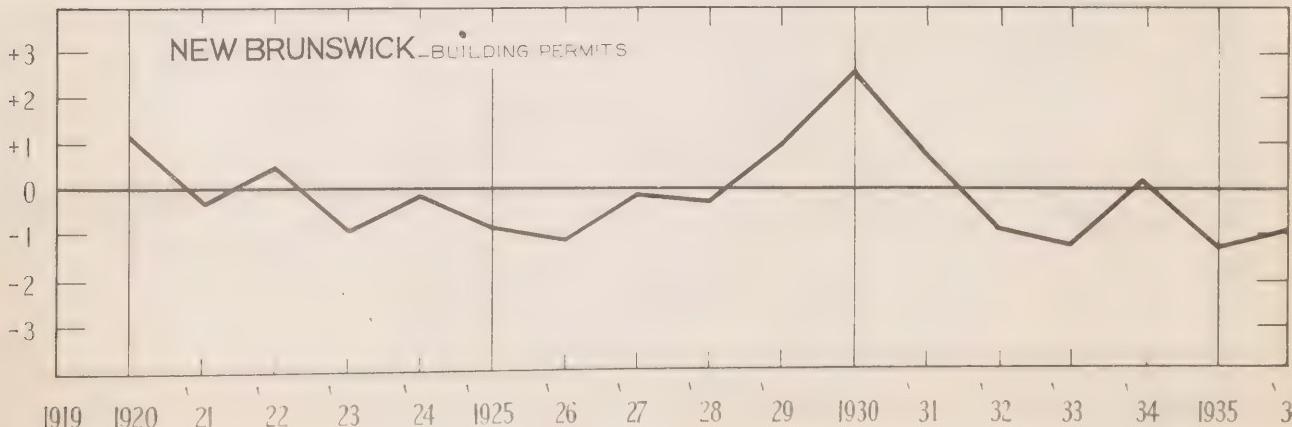
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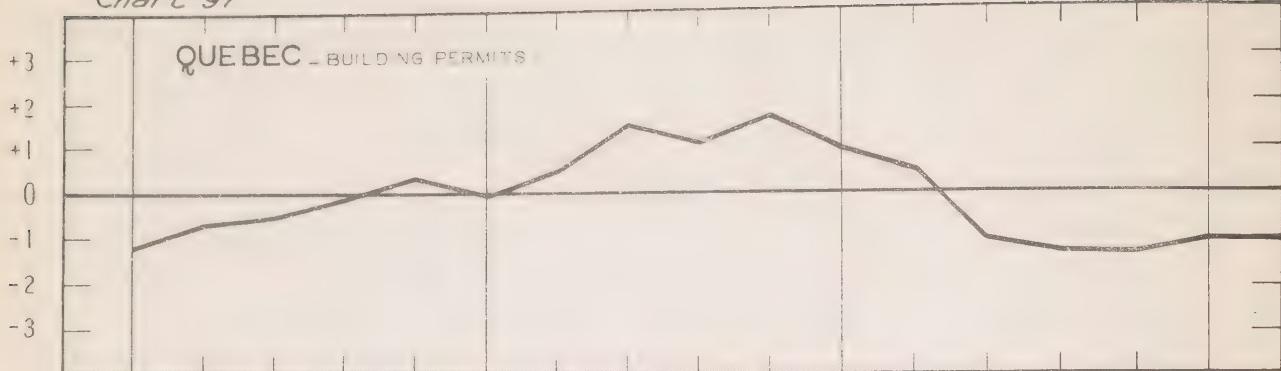


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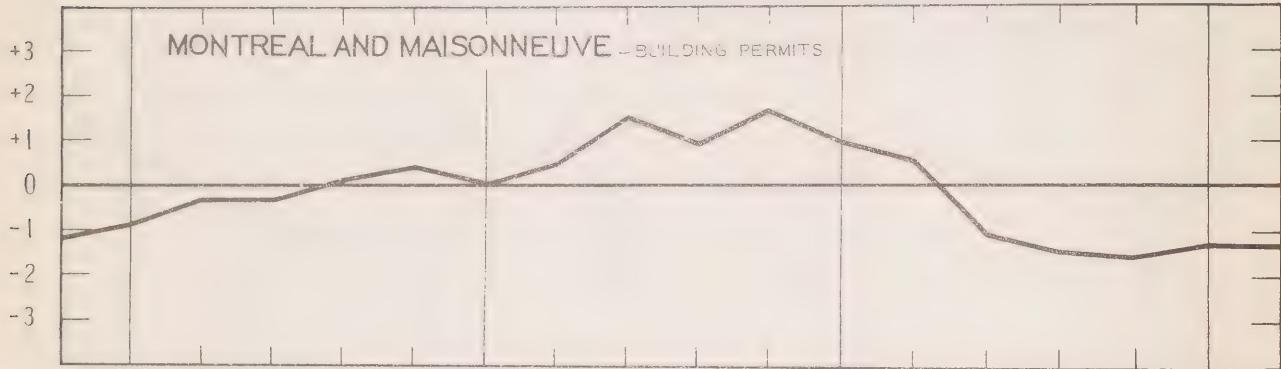


1919 1920 1921 1922 1923 1924 1925 1926 1927 1928 1929 1930 1931 1932 1933 1934 1935 1936

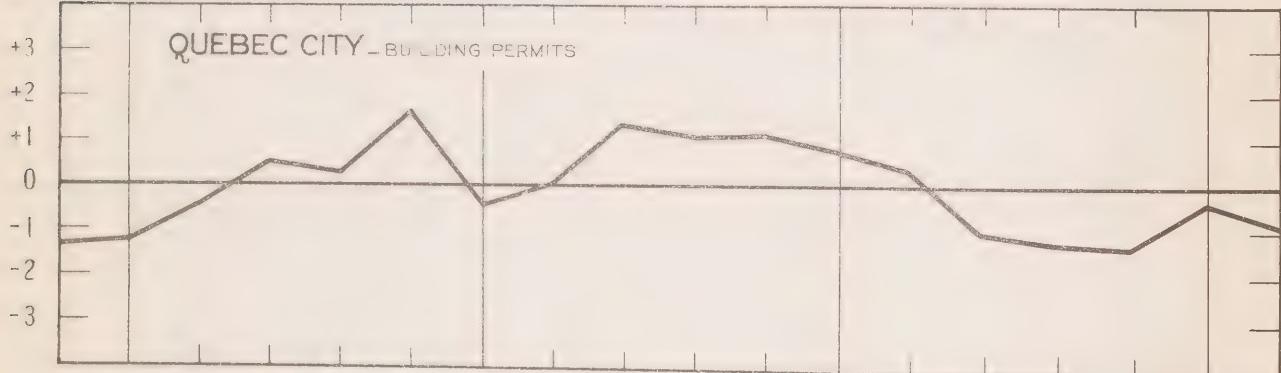
Chart 97



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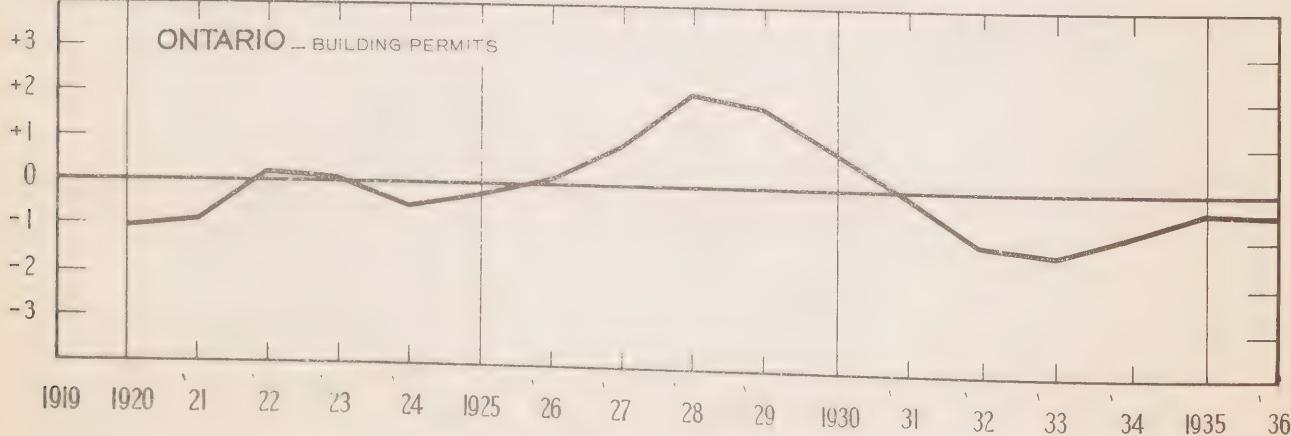


Chart 101

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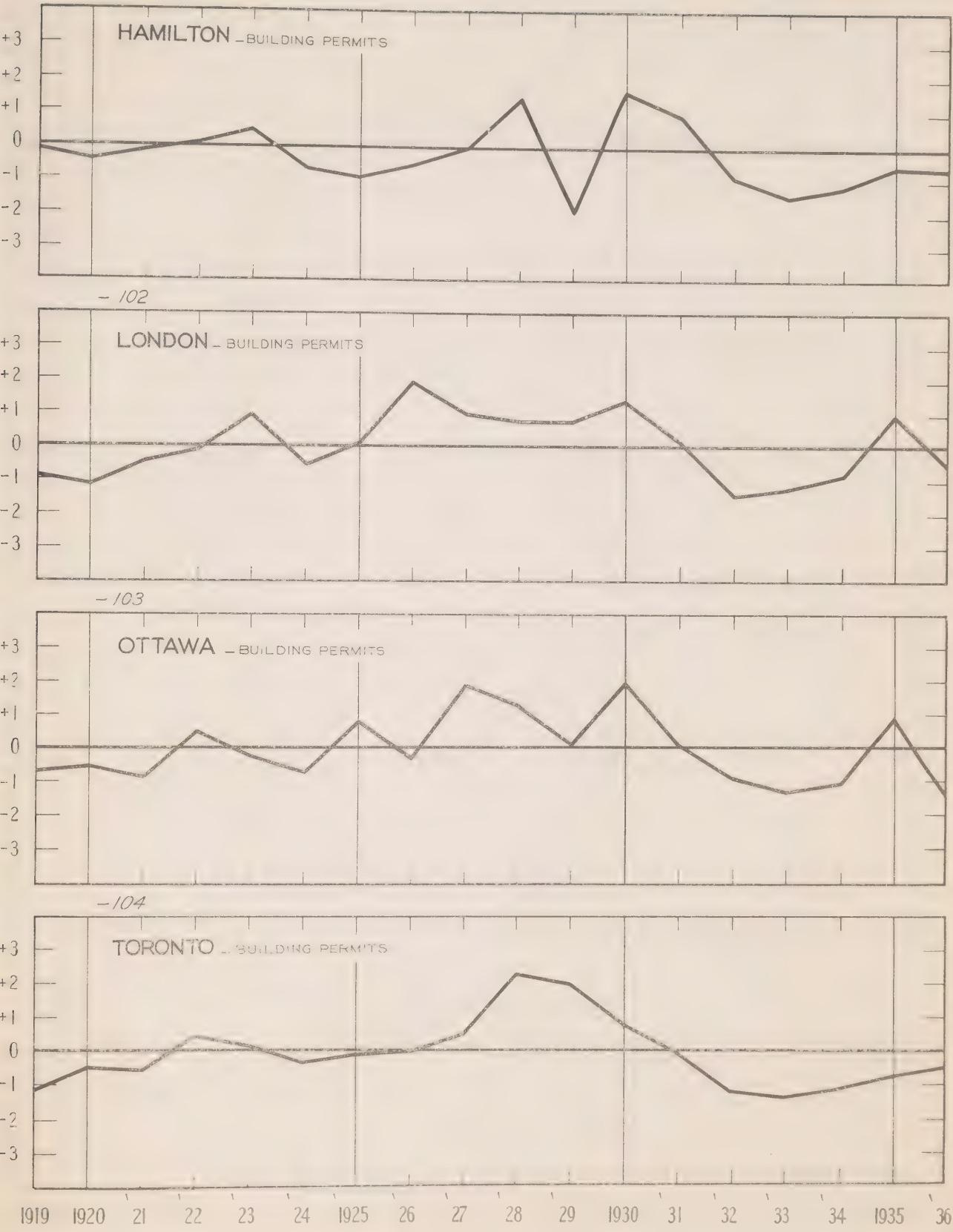
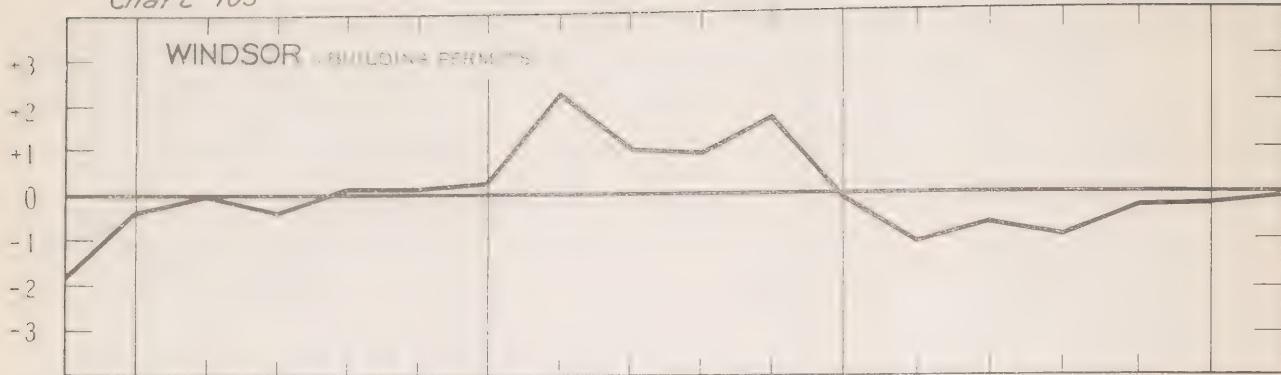
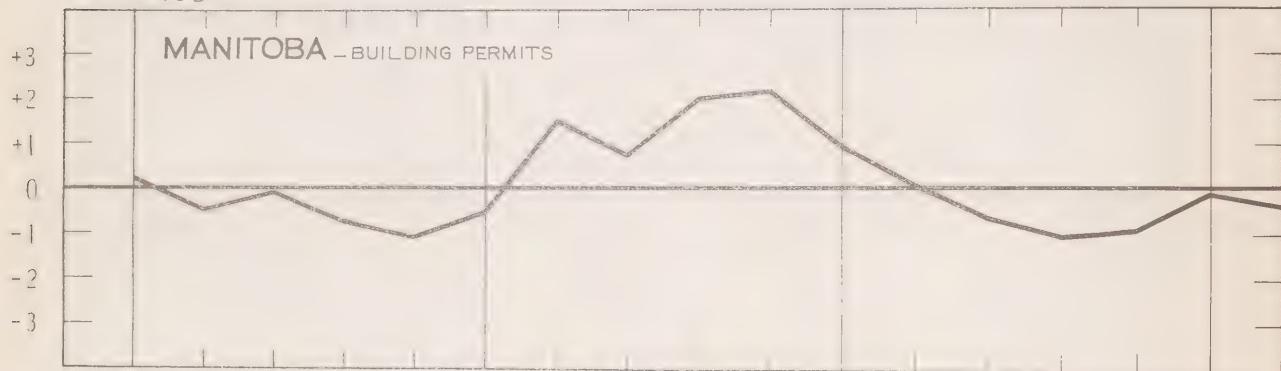


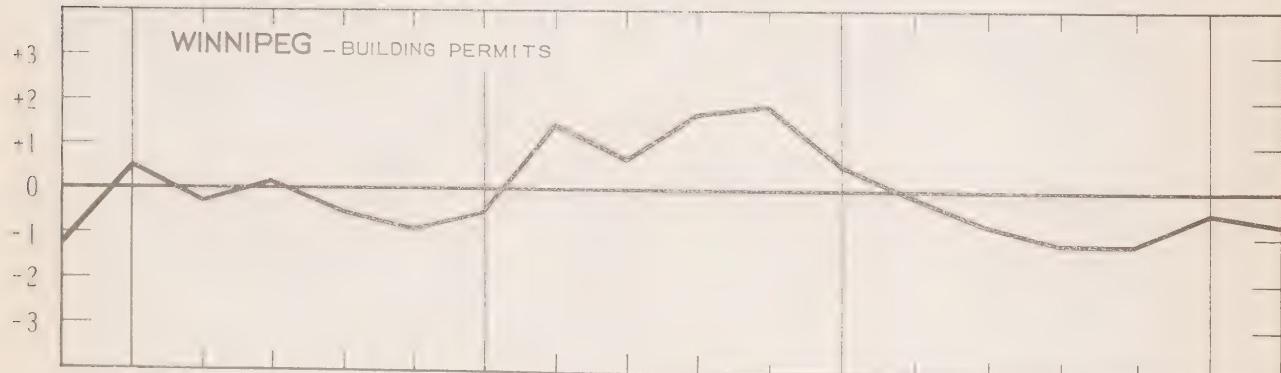
Chart 105



MANITOBA - BUILDING PERMITS



WINNIPEG - BUILDING PERMITS



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Chart 109

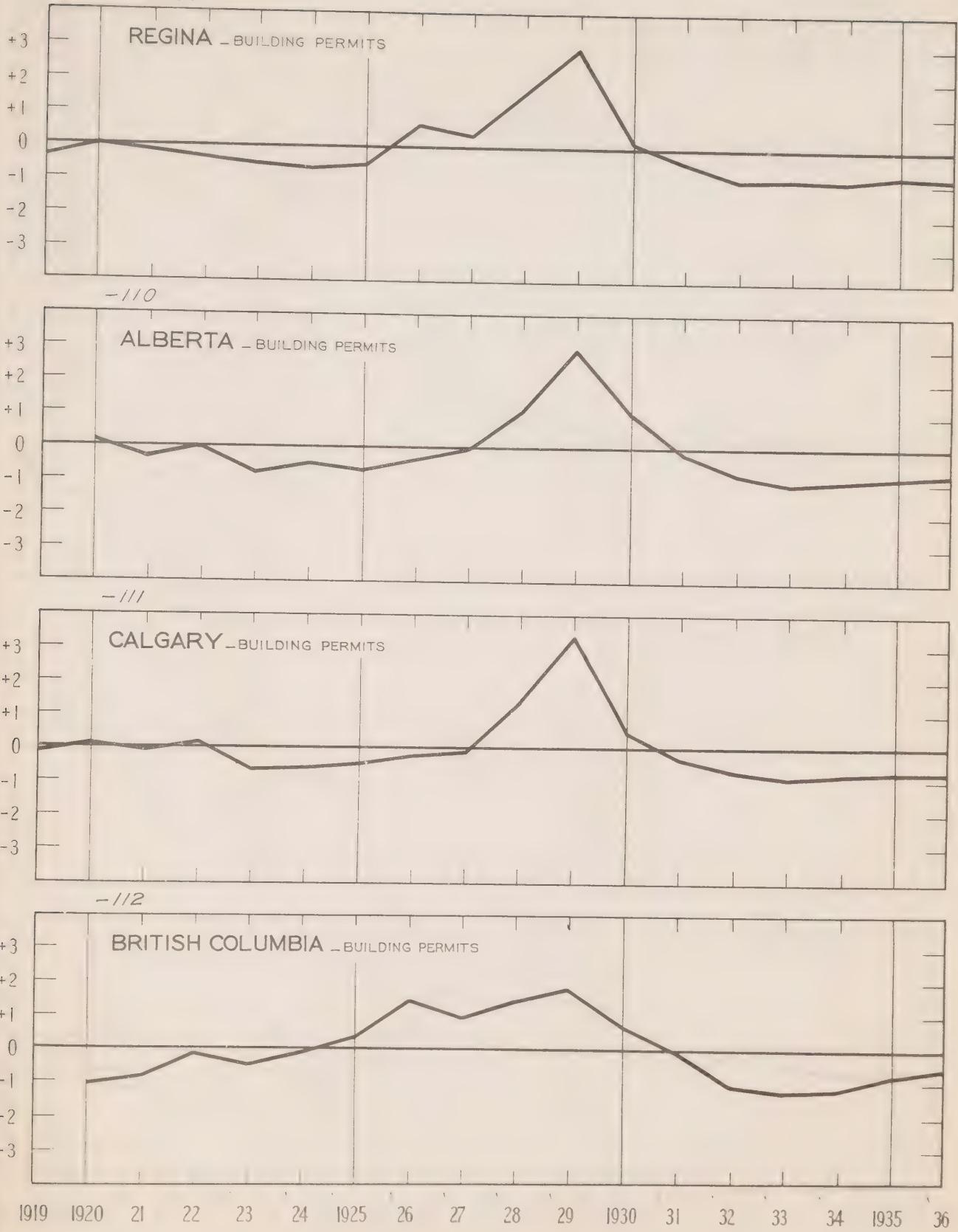
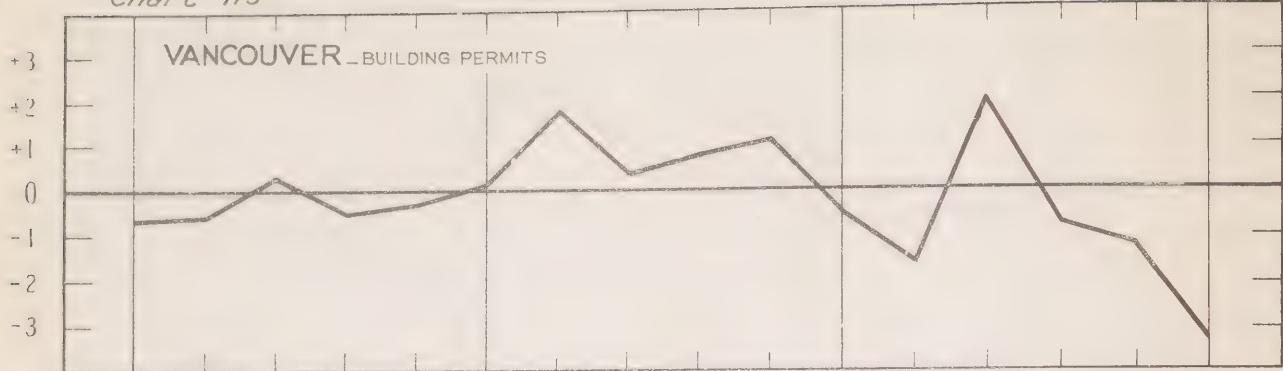
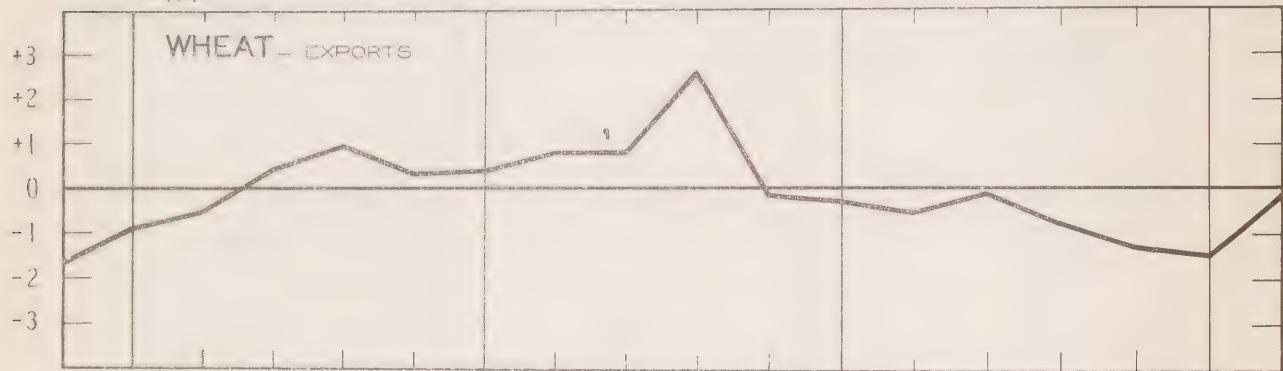


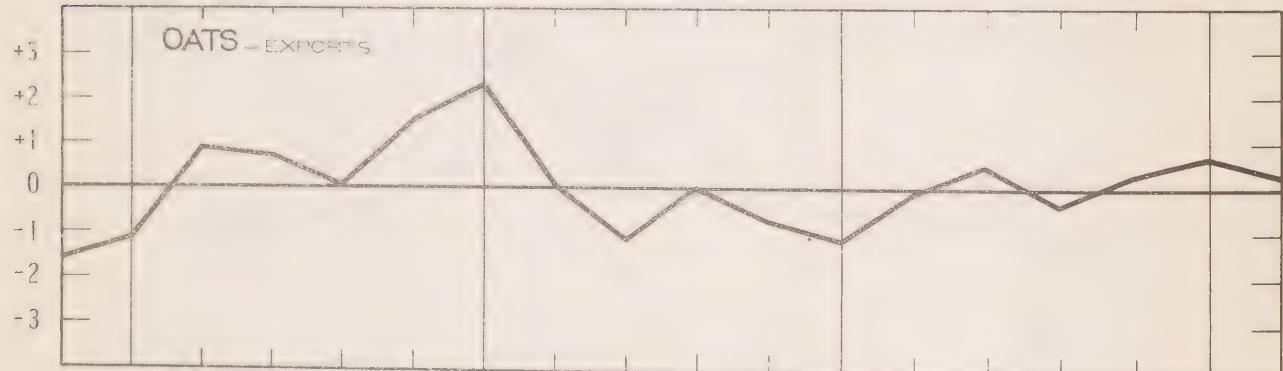
Chart 113



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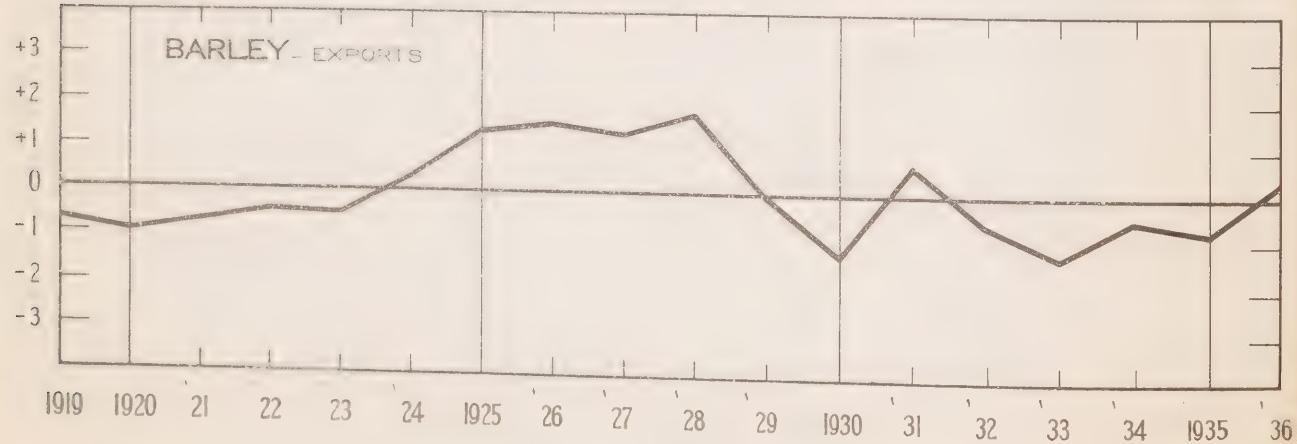
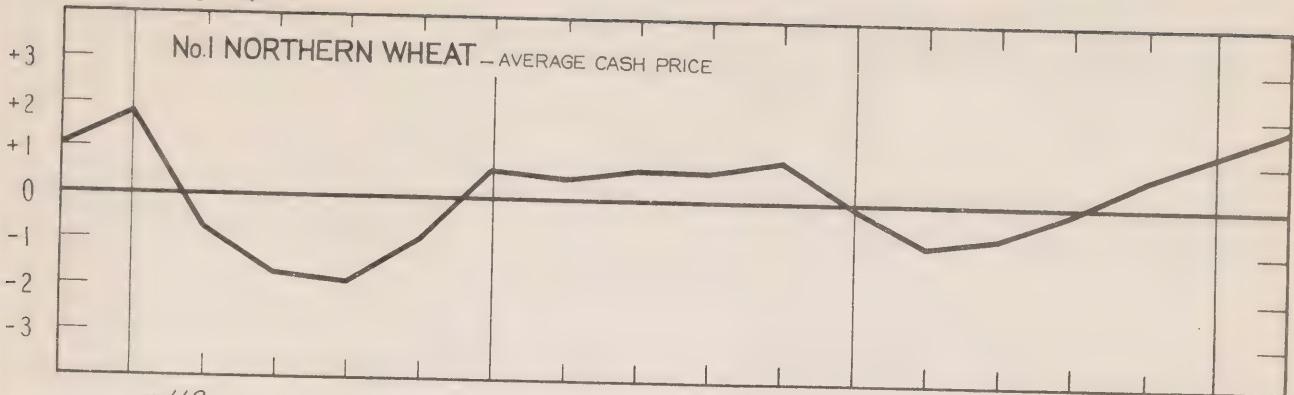
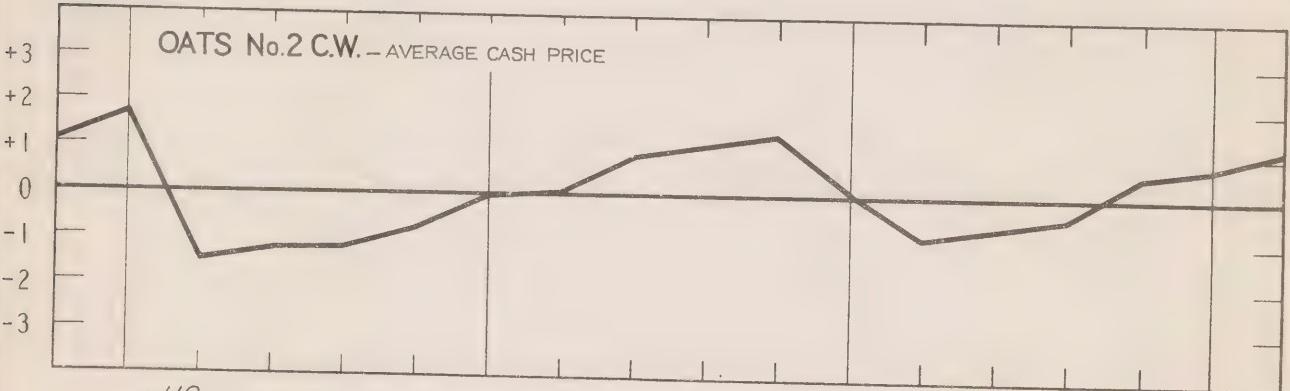


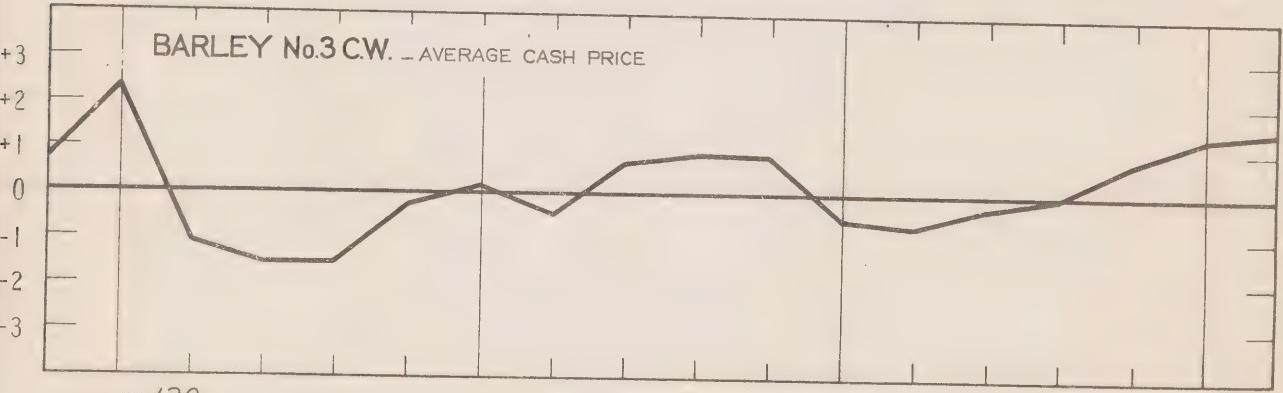
Chart 117



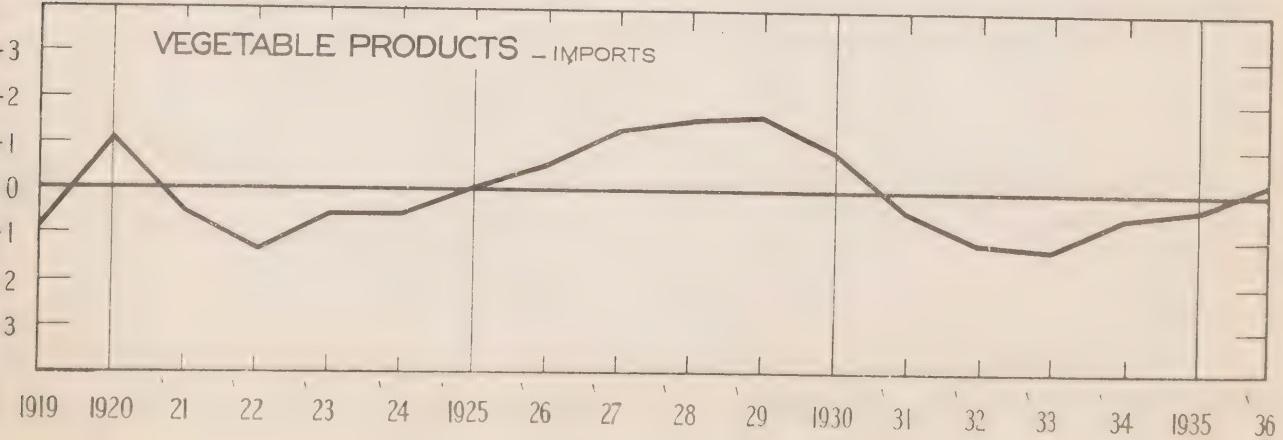
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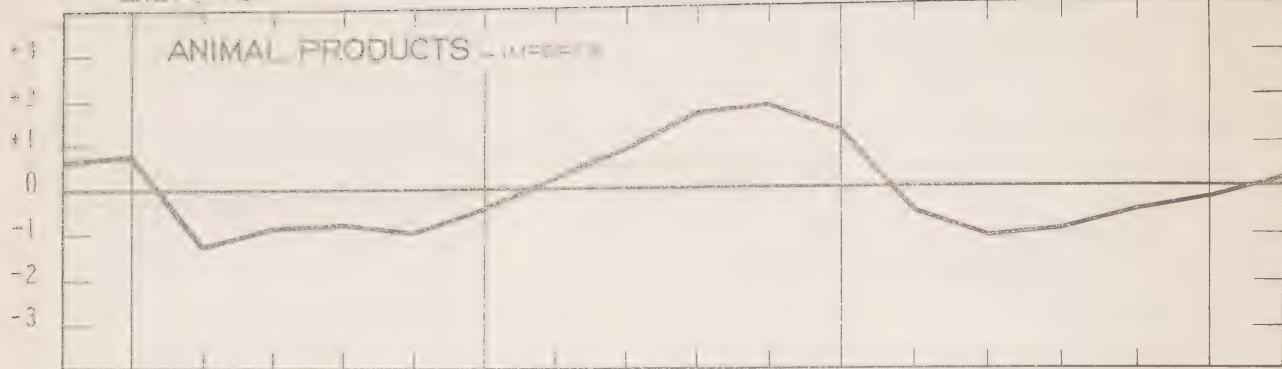


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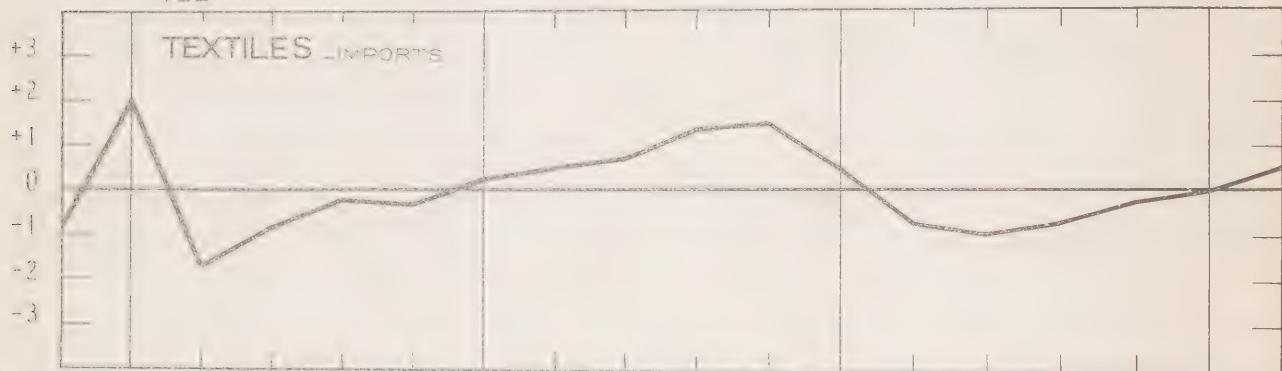


1919 1920 21 22 23 24 1925 26 27 28 29 1930 31 32 33 34 1935 36

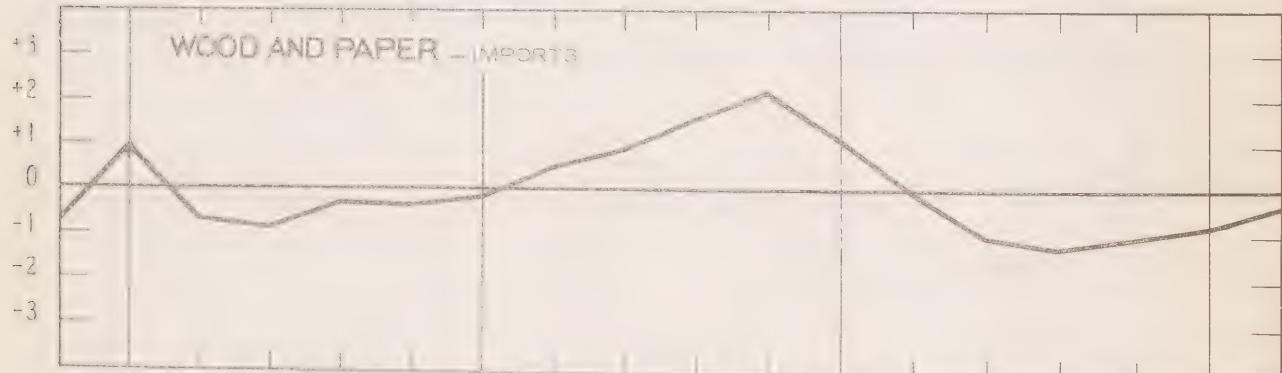
Chart 121



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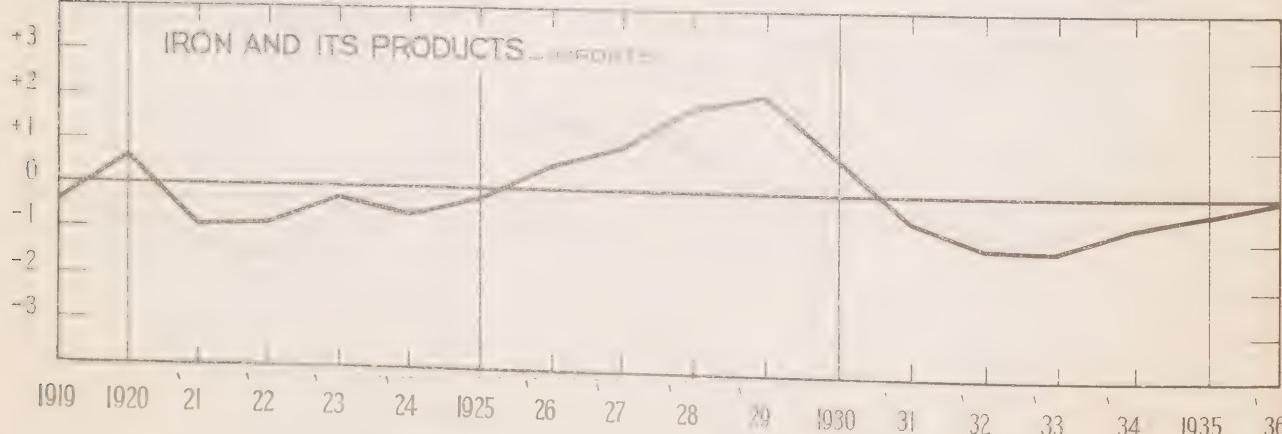
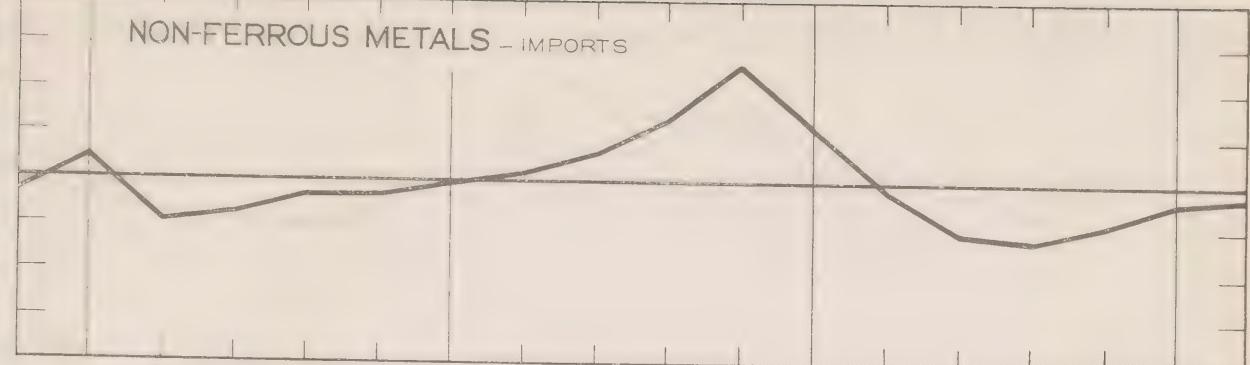


Chart 125

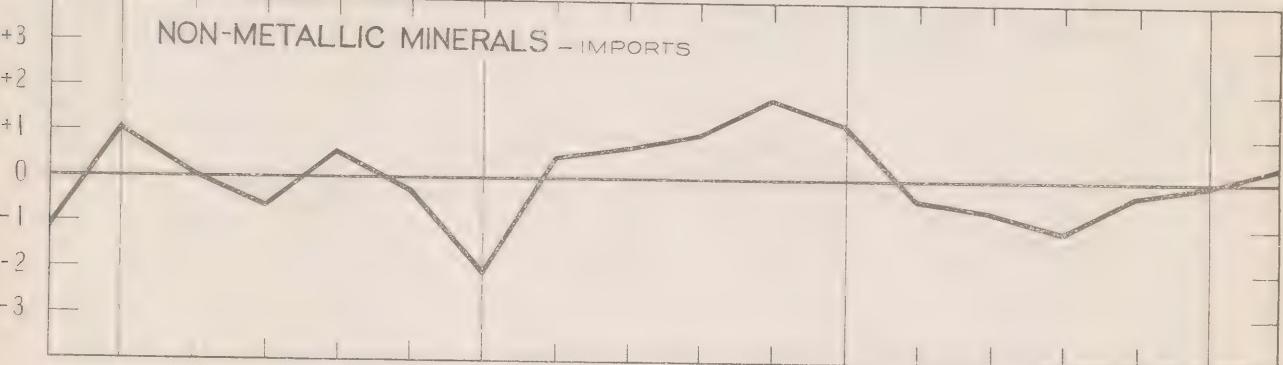
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NON-FERROUS METALS - IMPORTS



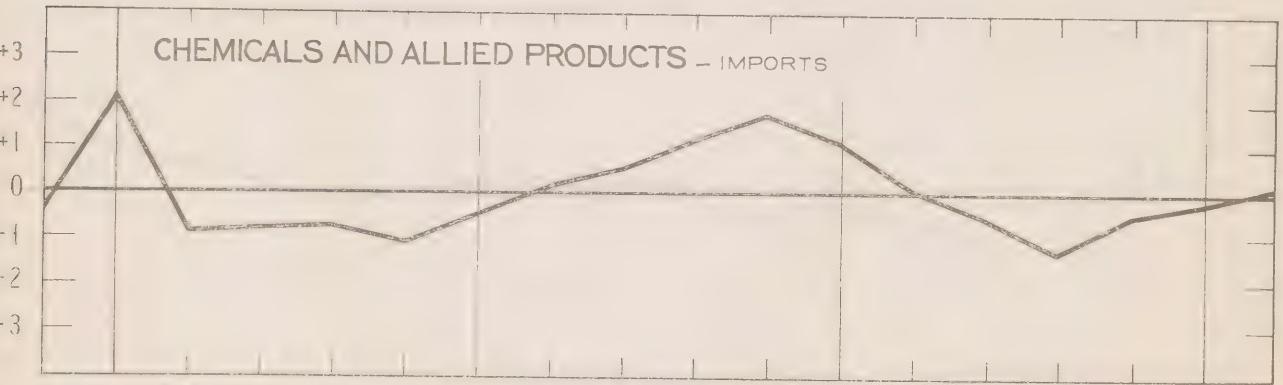
-126

NON-METALLIC MINERALS - IMPORTS



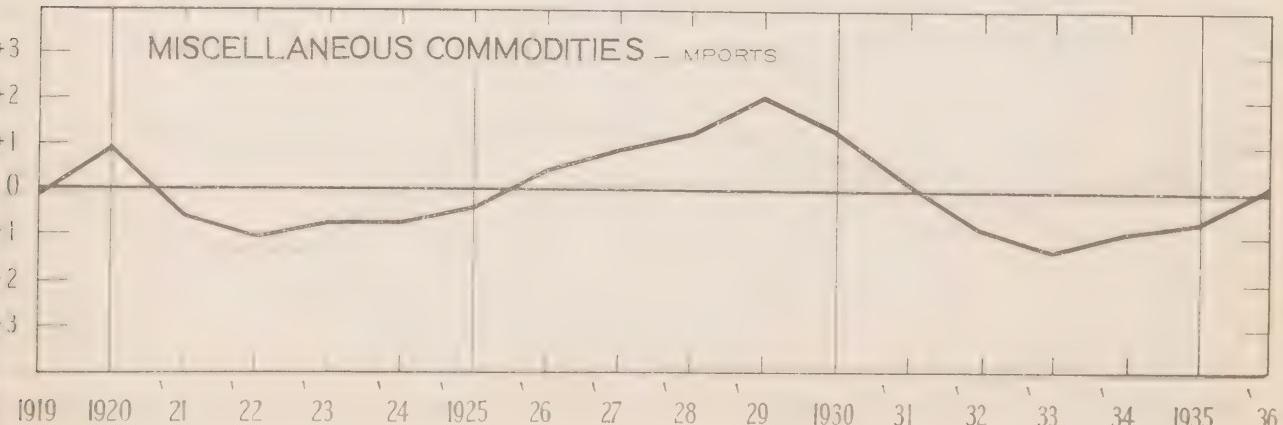
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CHEMICALS AND ALLIED PRODUCTS - IMPORTS



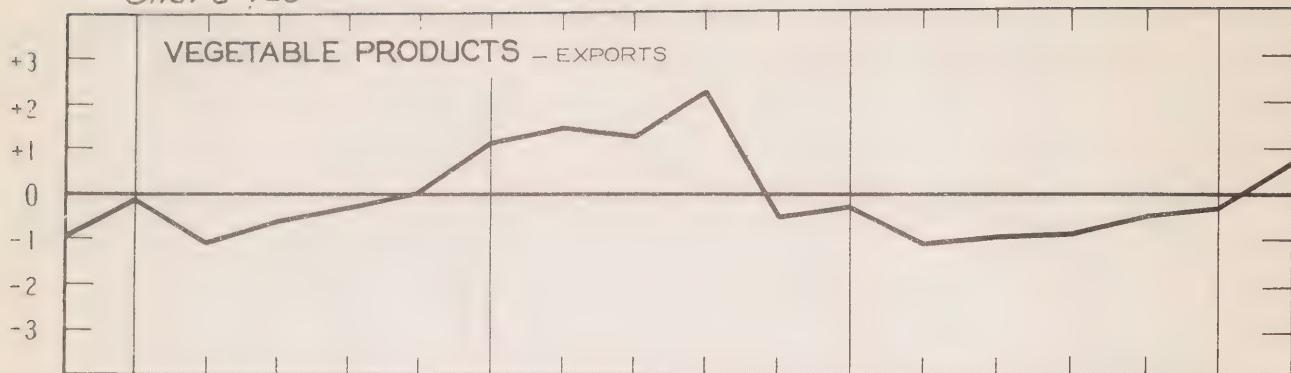
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MISCELLANEOUS COMMODITIES - IMPORTS

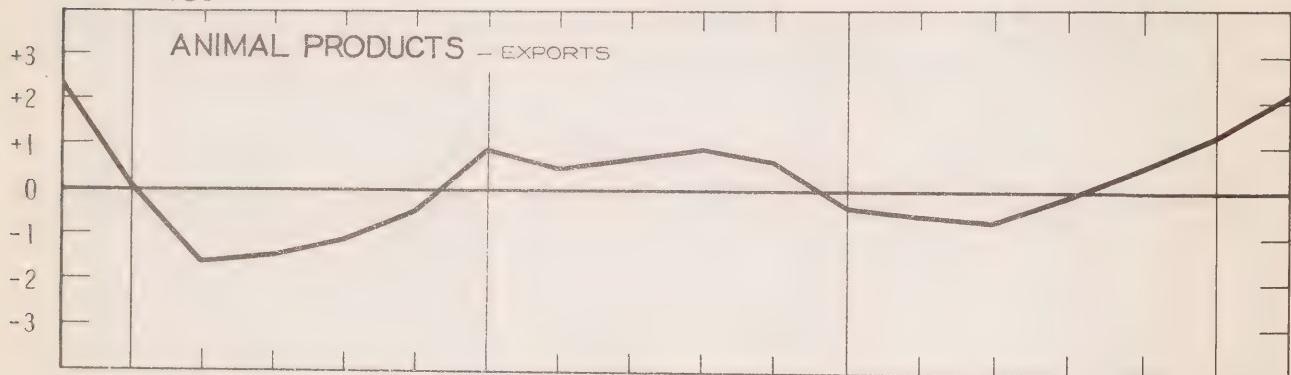


1919 1920 21 22 23 24 1925 26 27 28 29 1930 31 32 33 34 1935 36

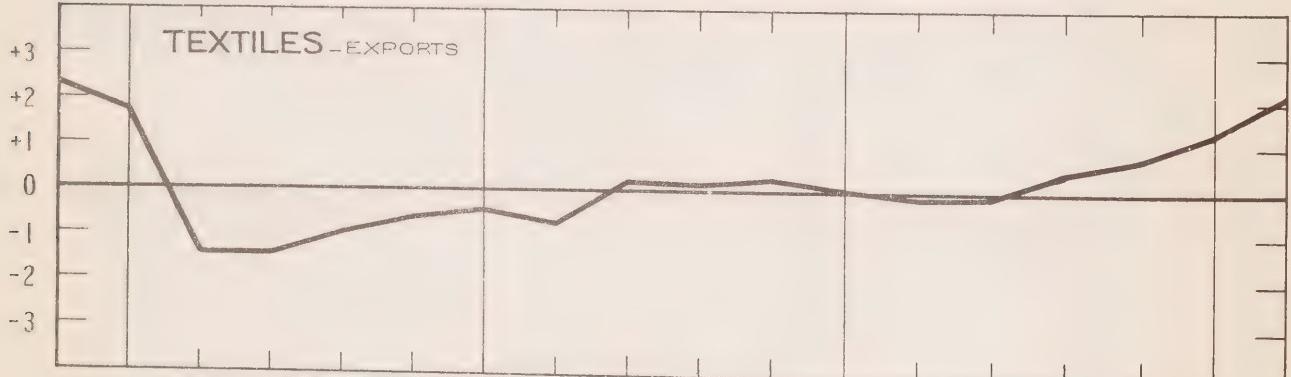
Chart 129



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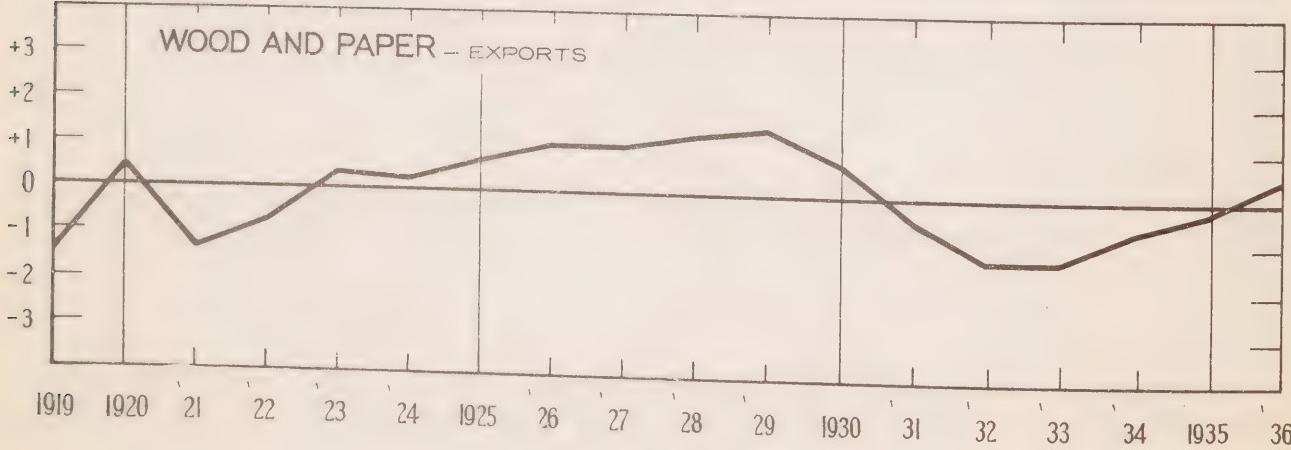
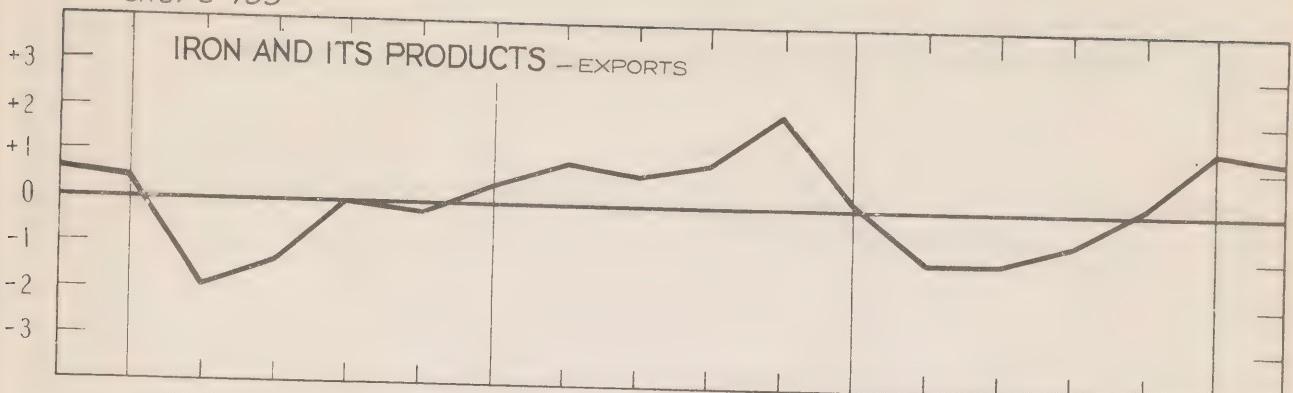
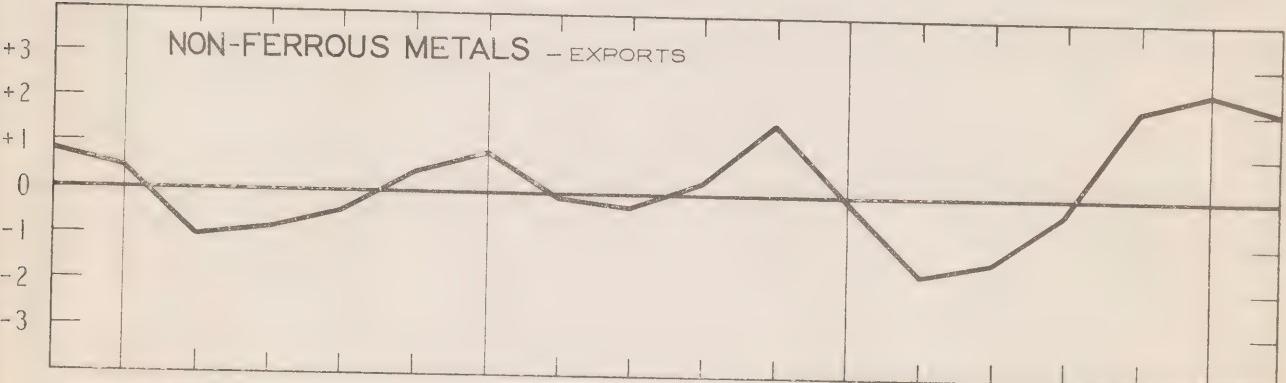


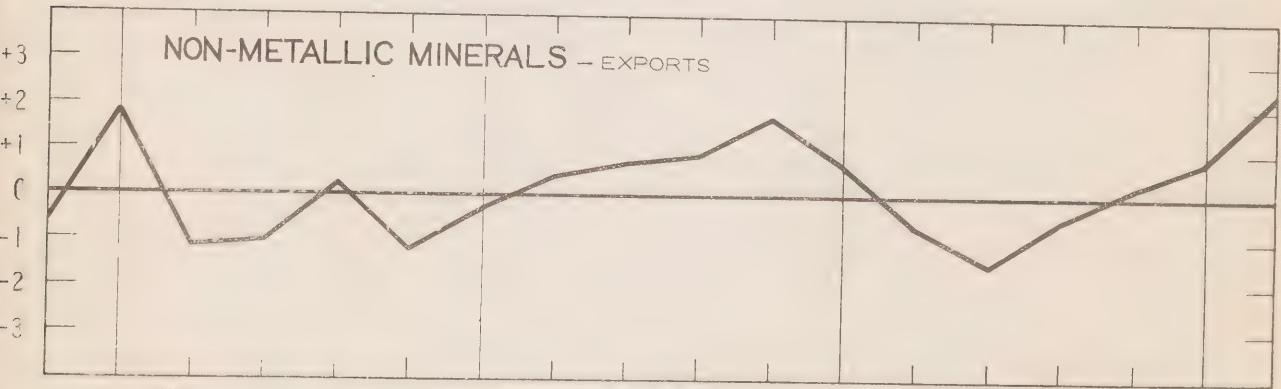
Chart 133



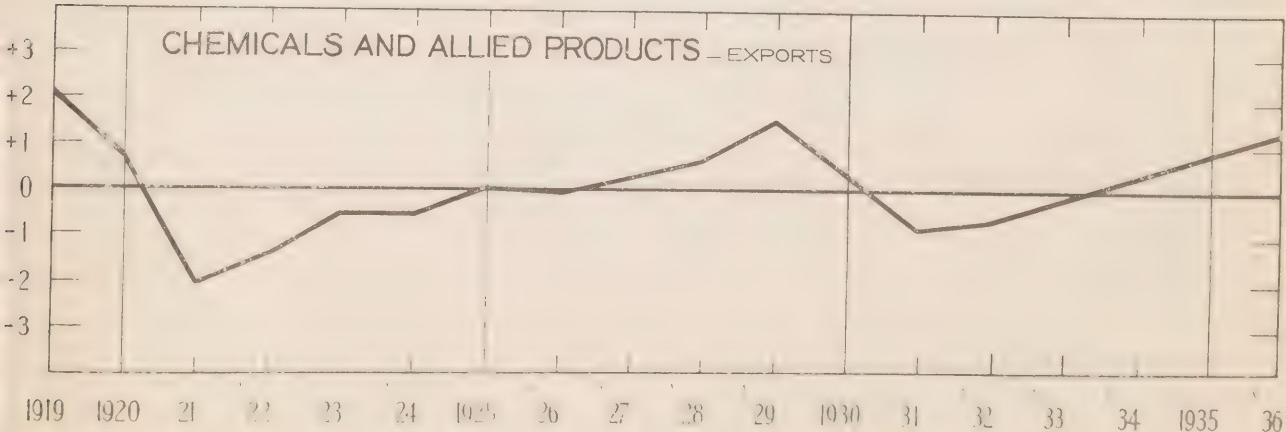
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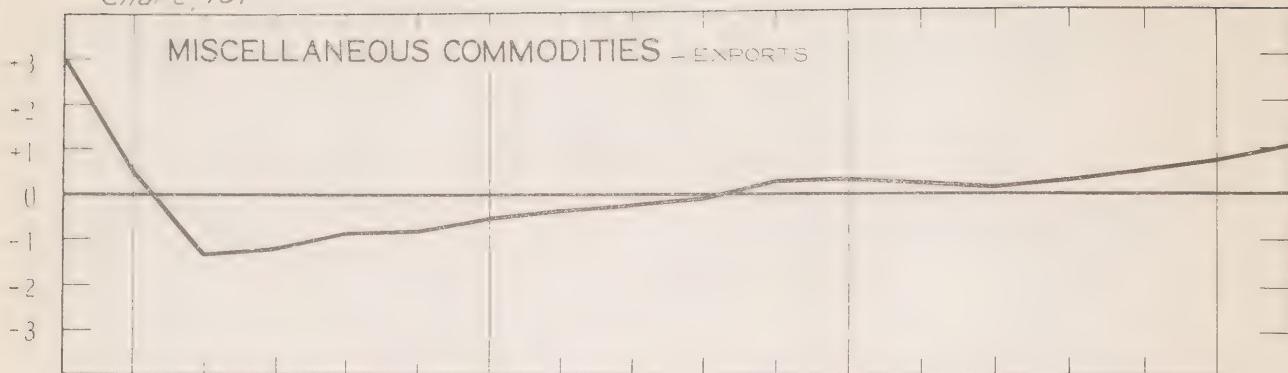


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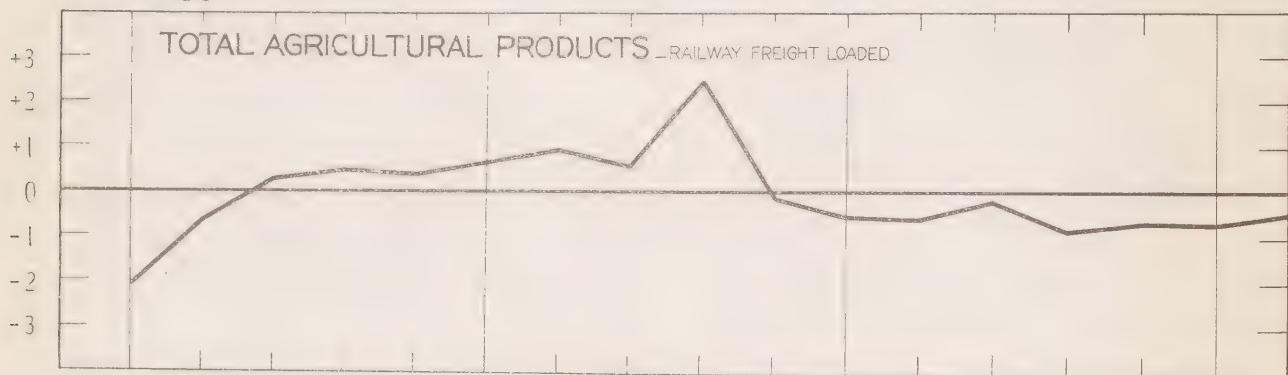


1919 1920 21 22 23 24 1925 26 27 28 29 1930 31 32 33 34 1935 36

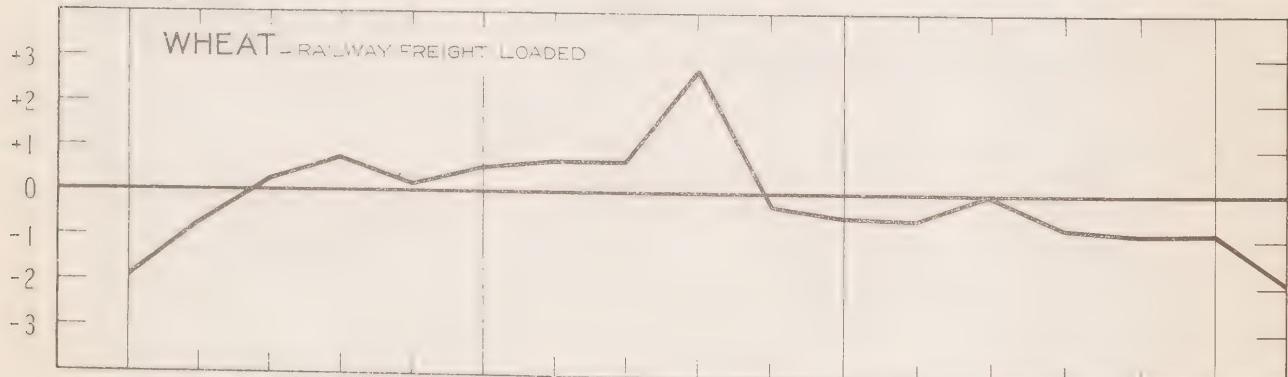
Chart 137



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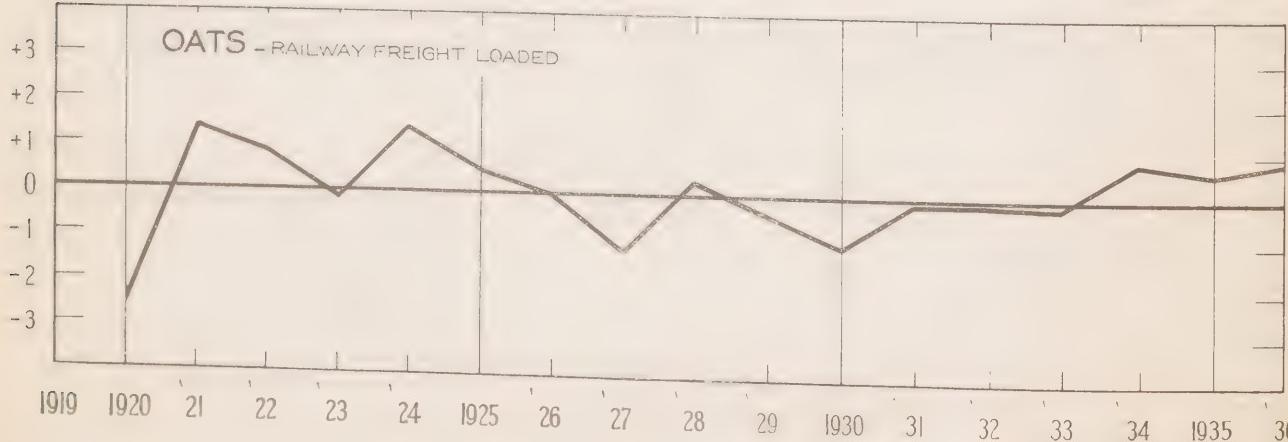
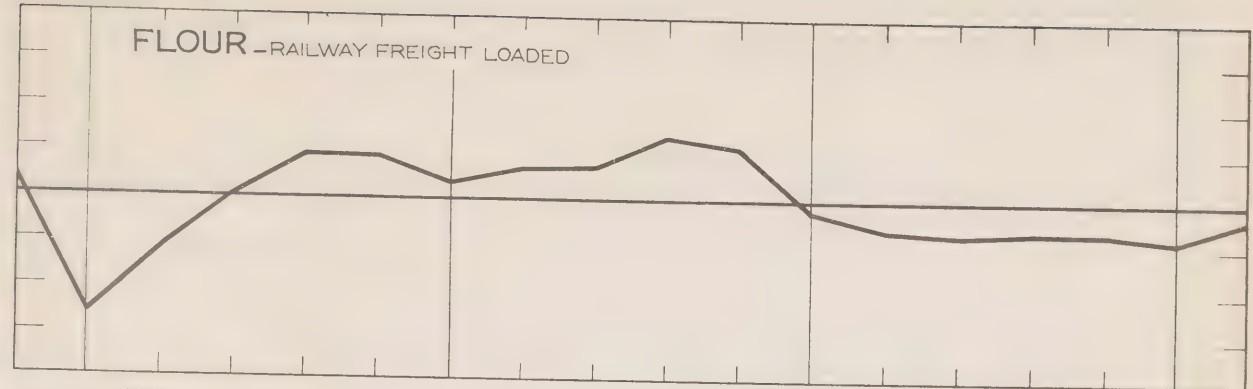
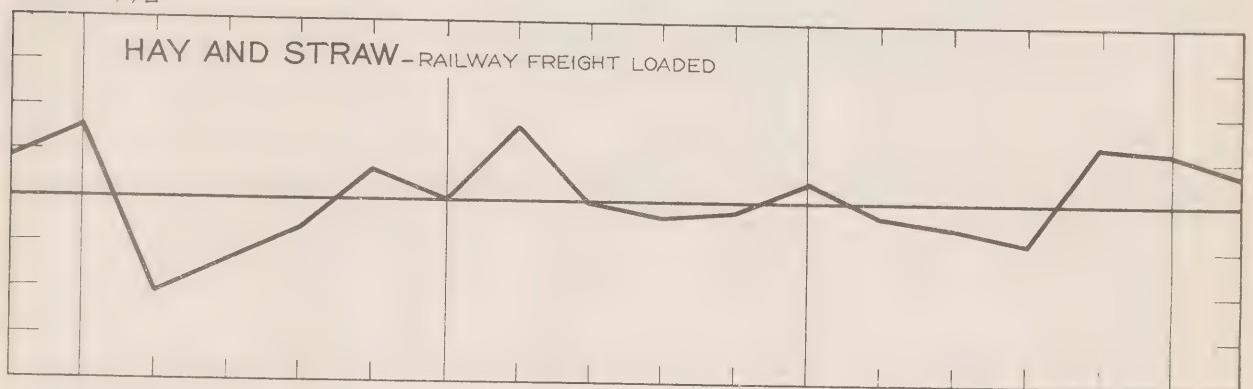


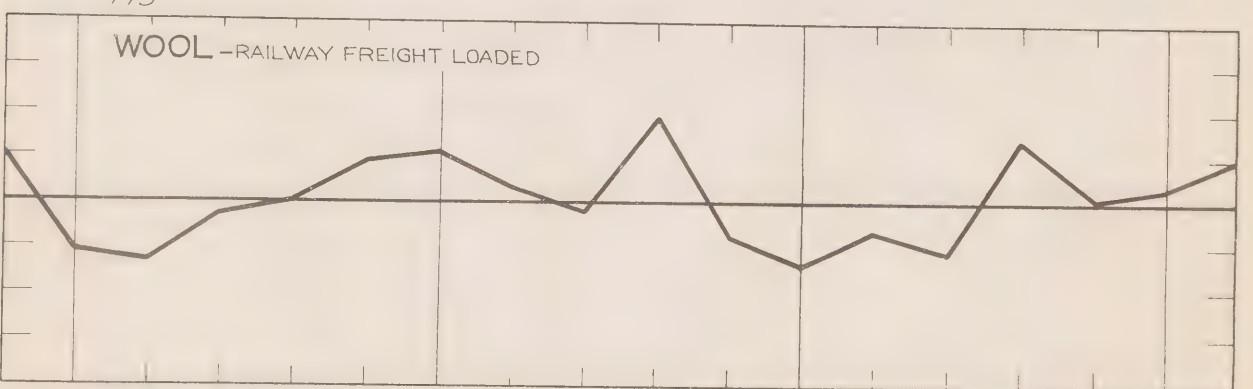
Chart 141



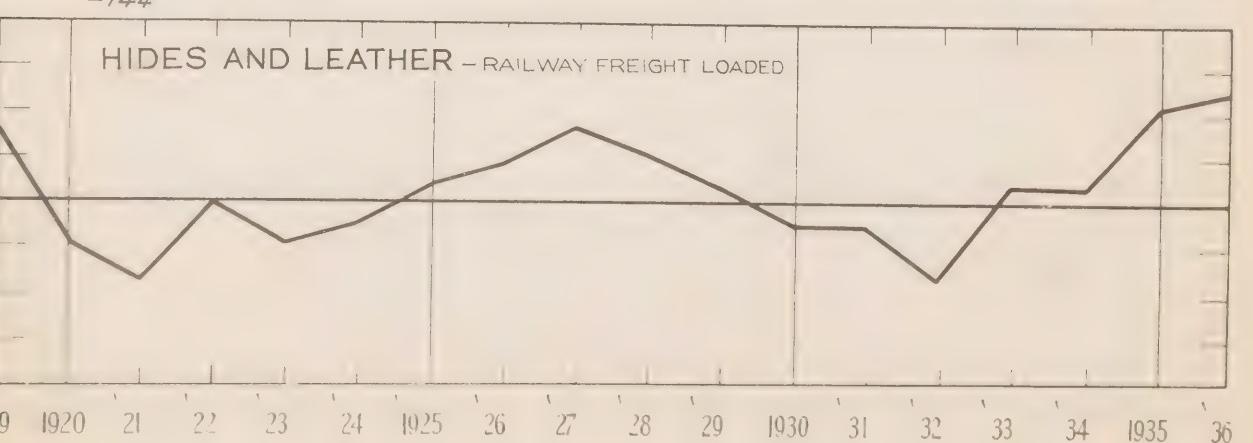
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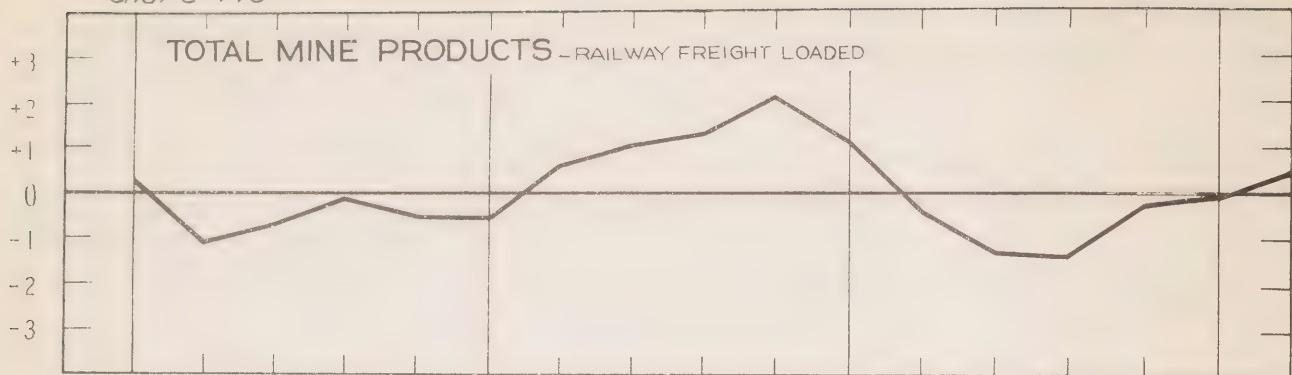


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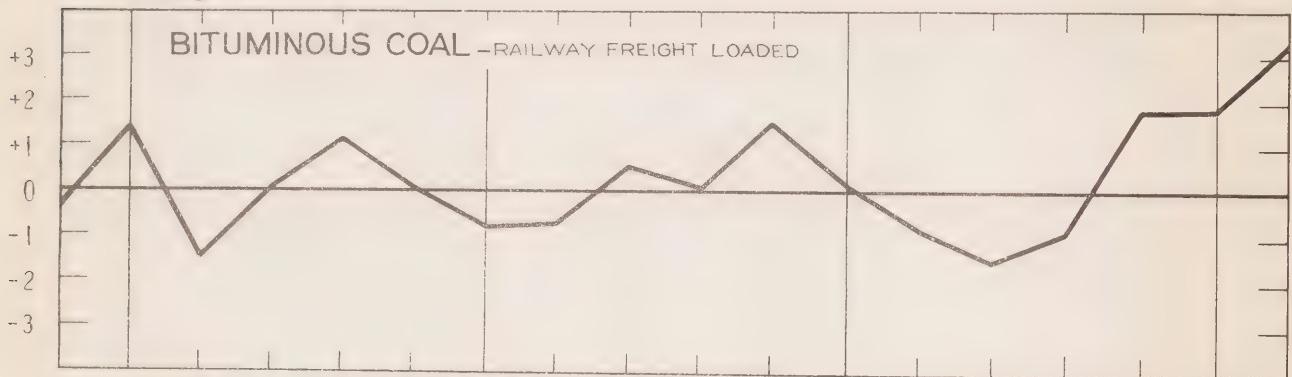


1919 1920 21 22 23 24 1925 26 27 28 29 1930 31 32 33 34 1935 36

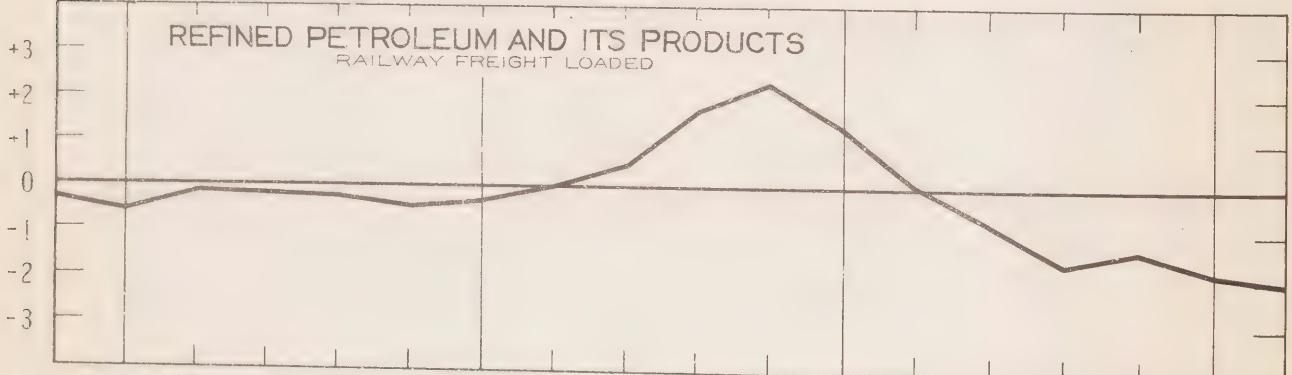
Chart 145



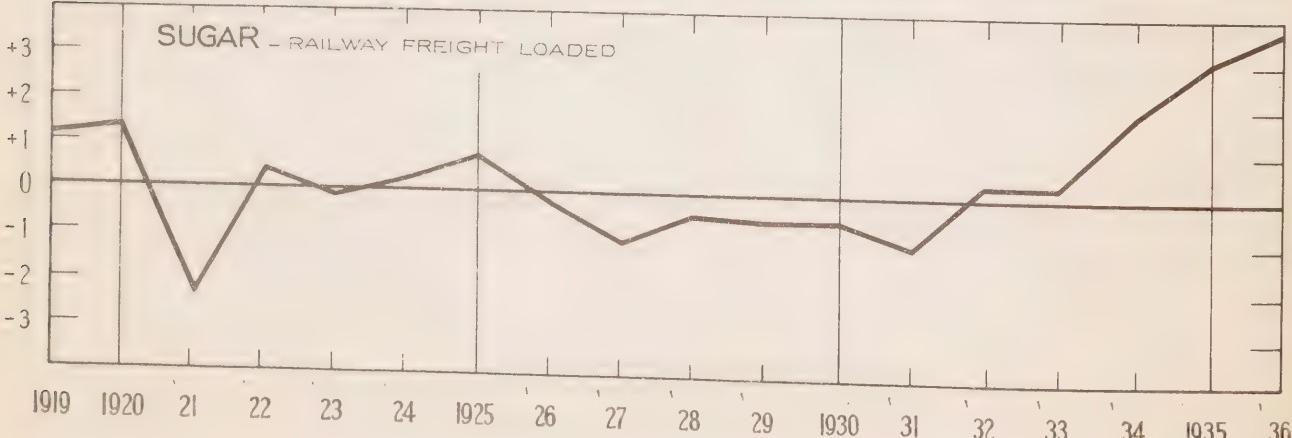
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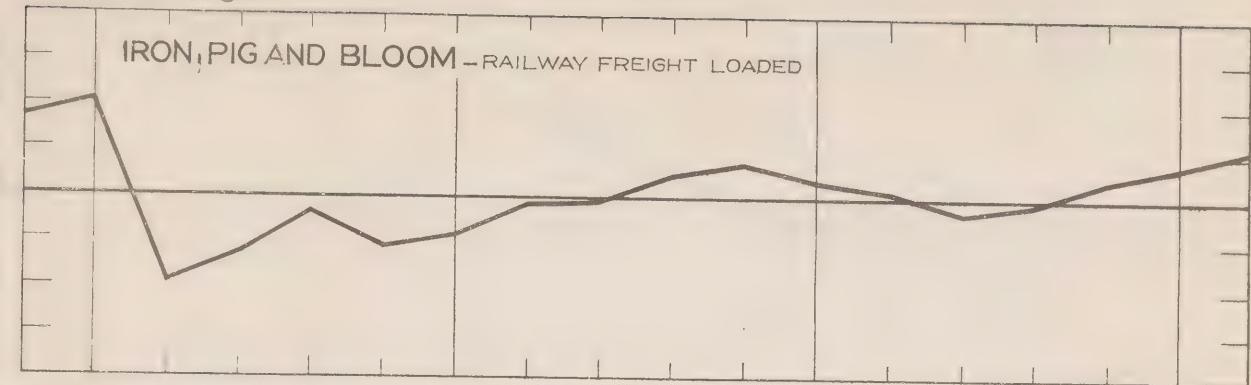


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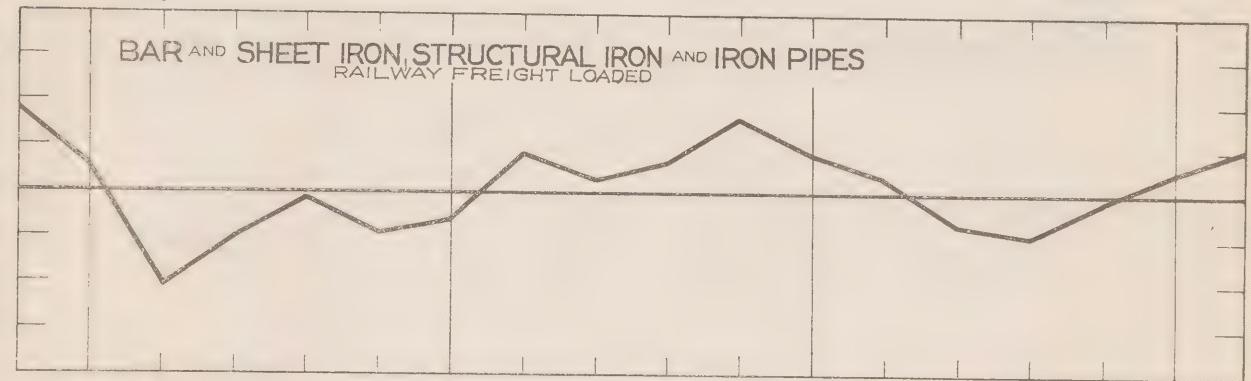


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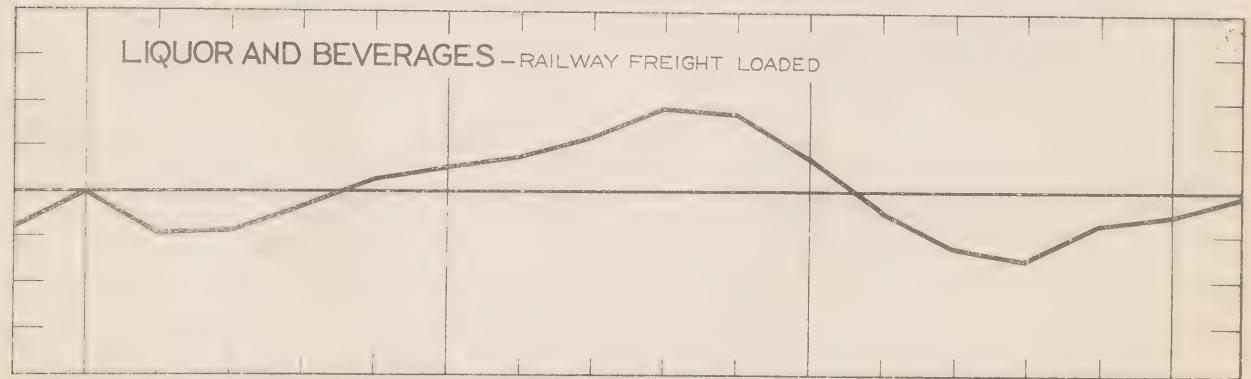
Chart 149



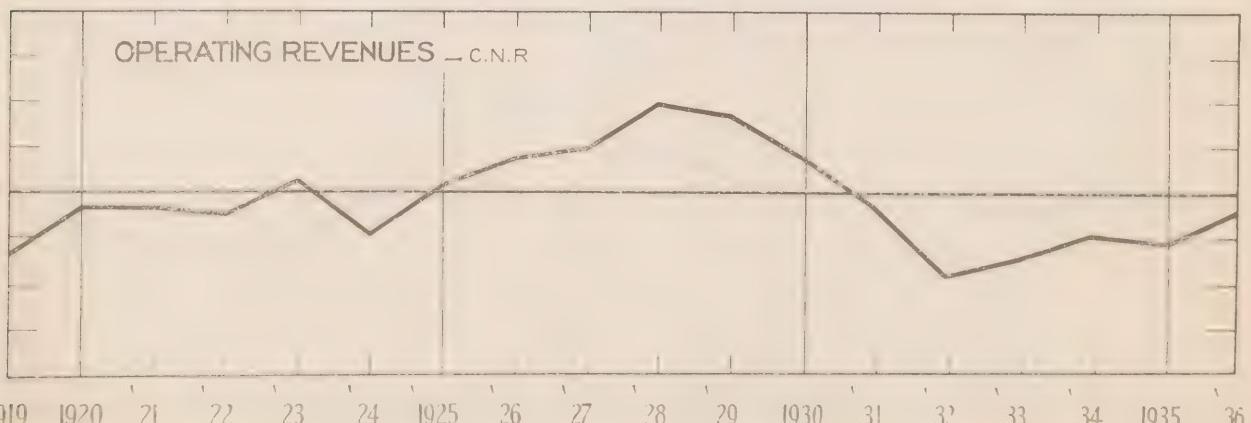
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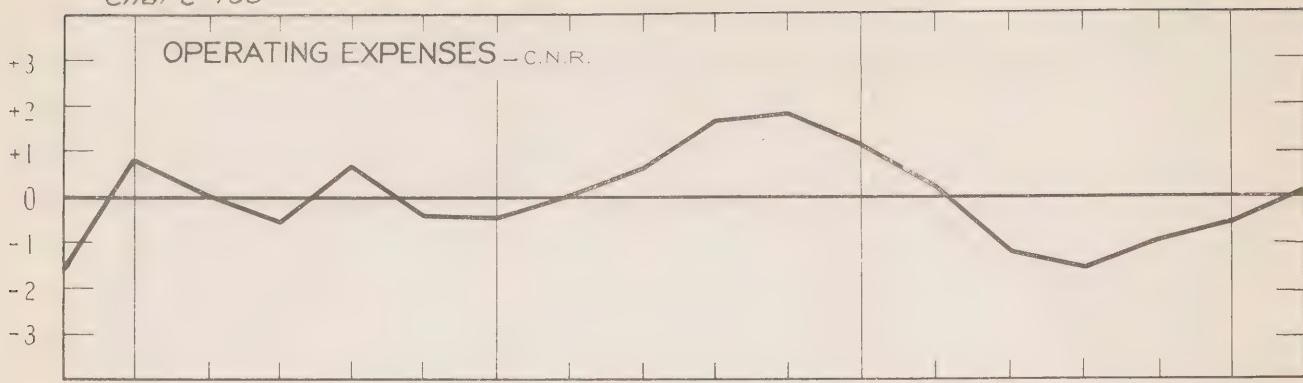


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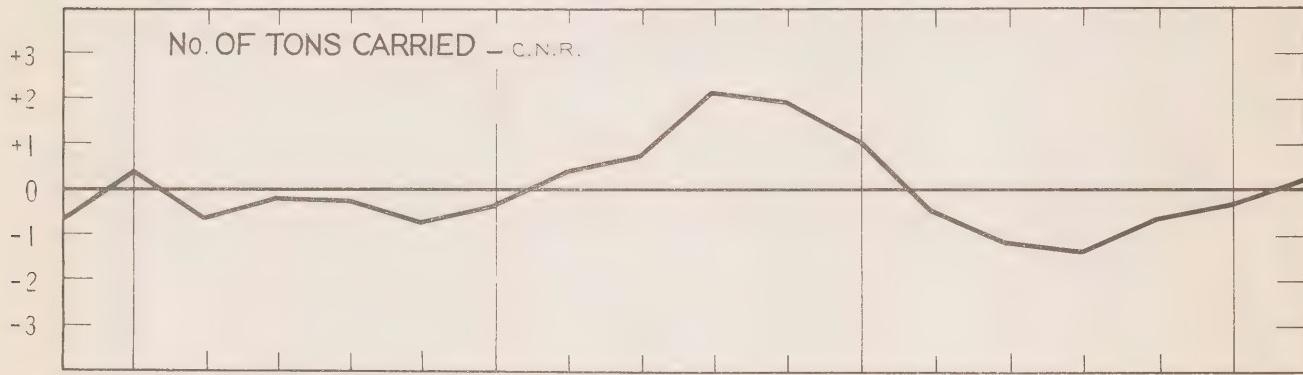


1919 1920 21 22 23 24 1925 26 27 28 29 1930 31 32 33 34 1935 36

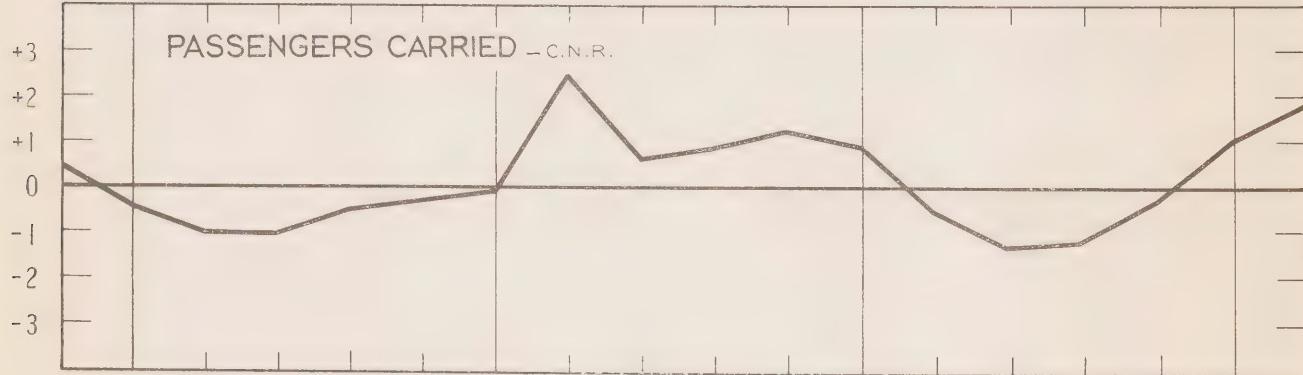
Chart 153



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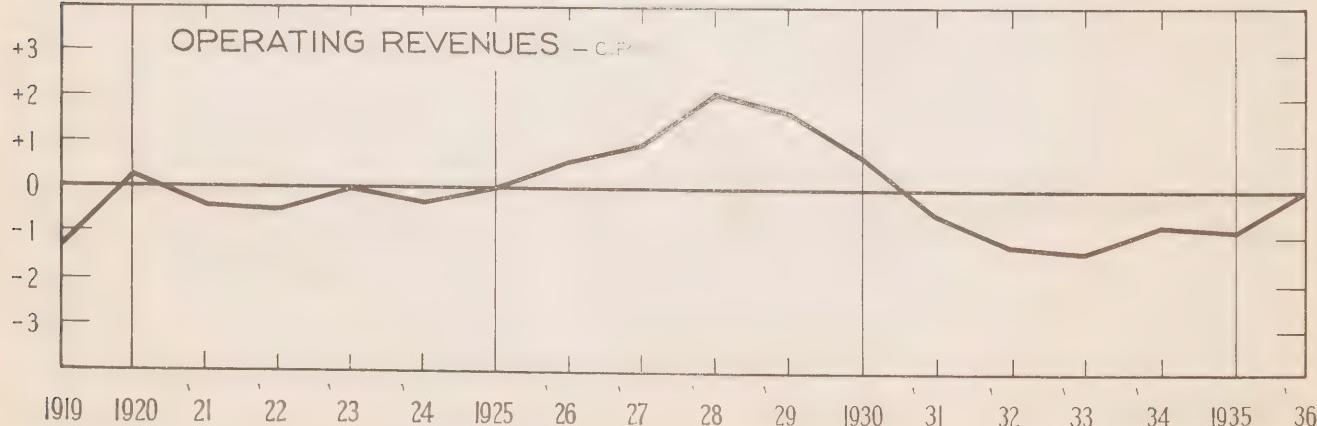
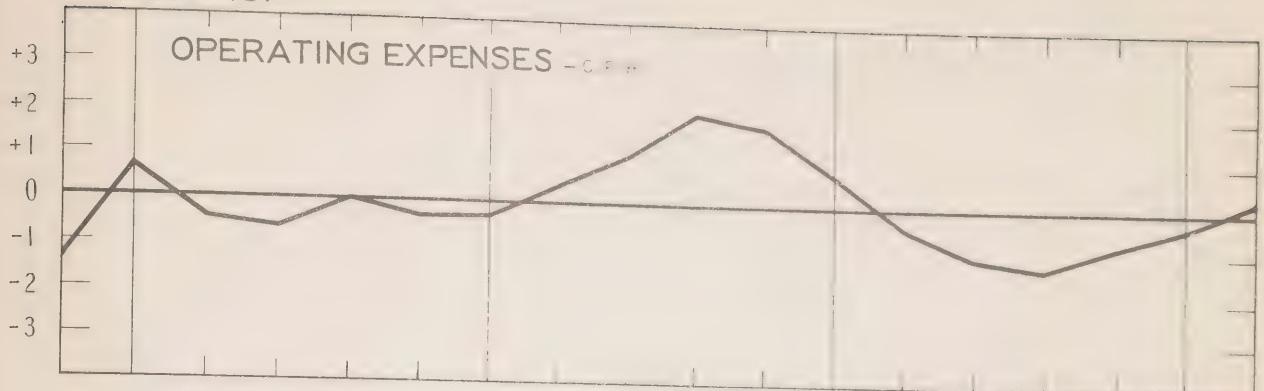
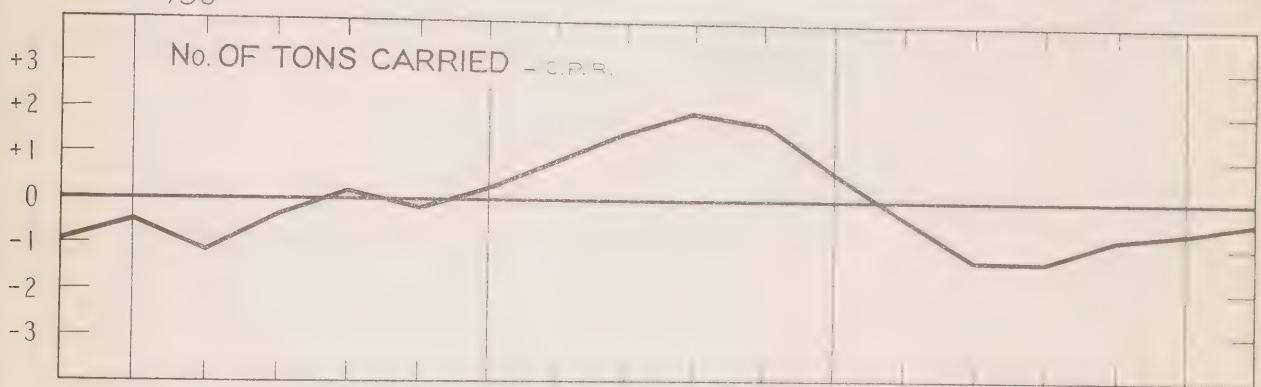


Chart 157



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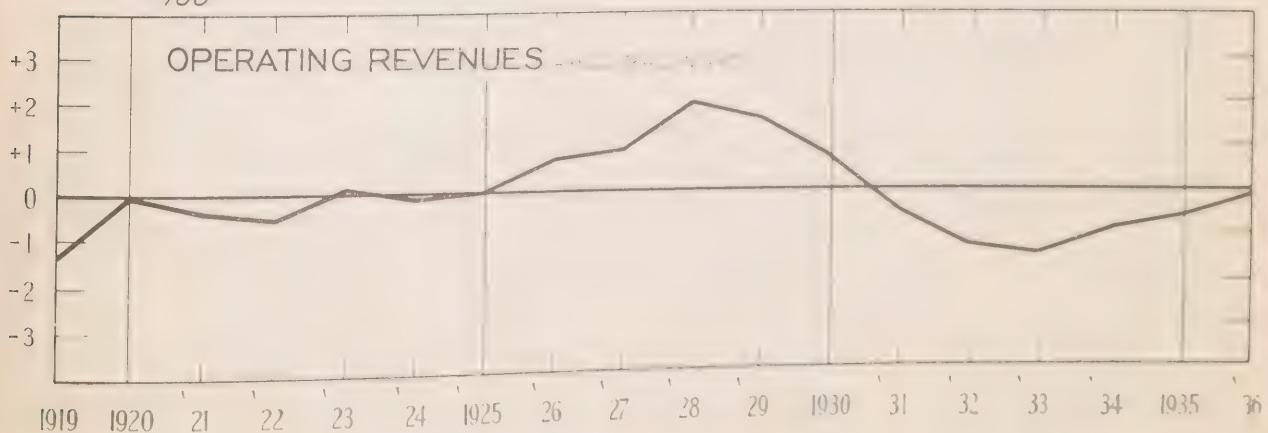
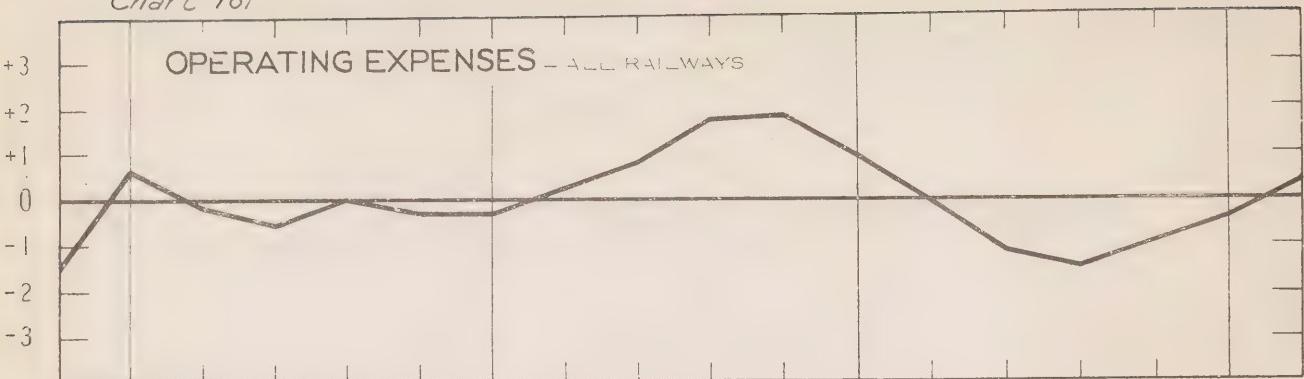
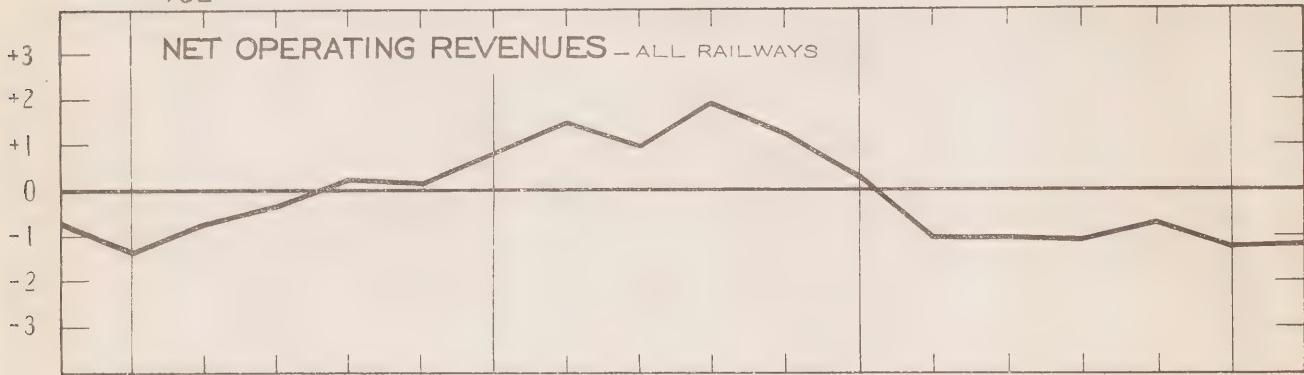


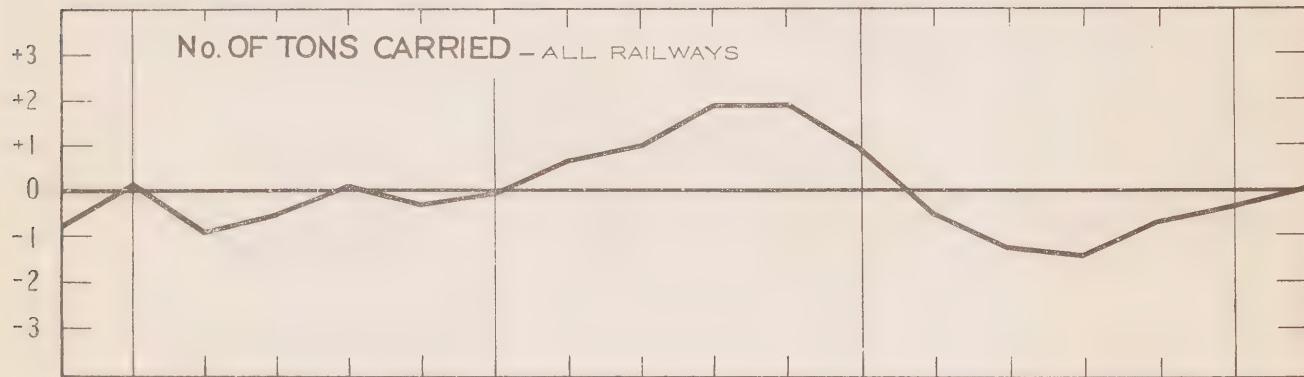
Chart 161



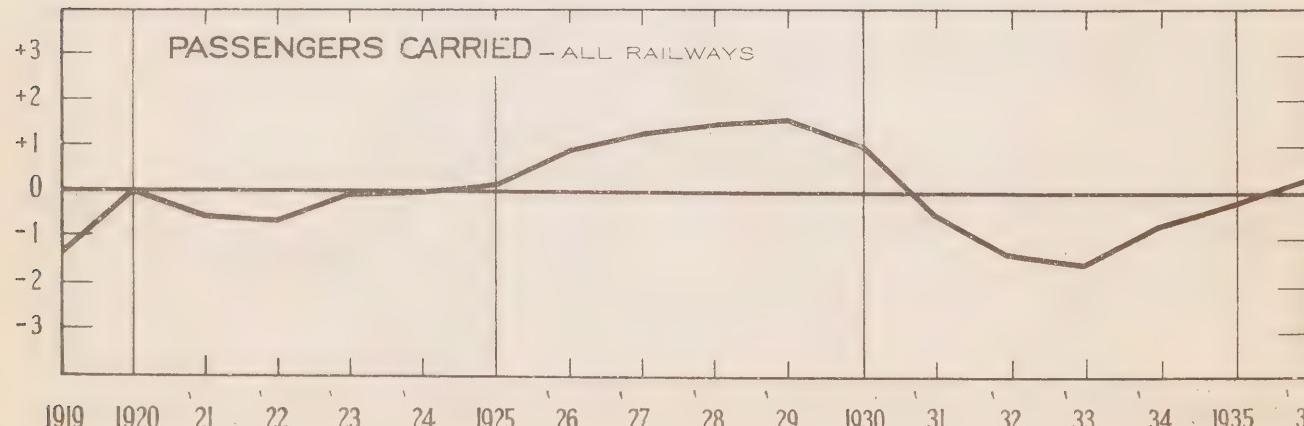
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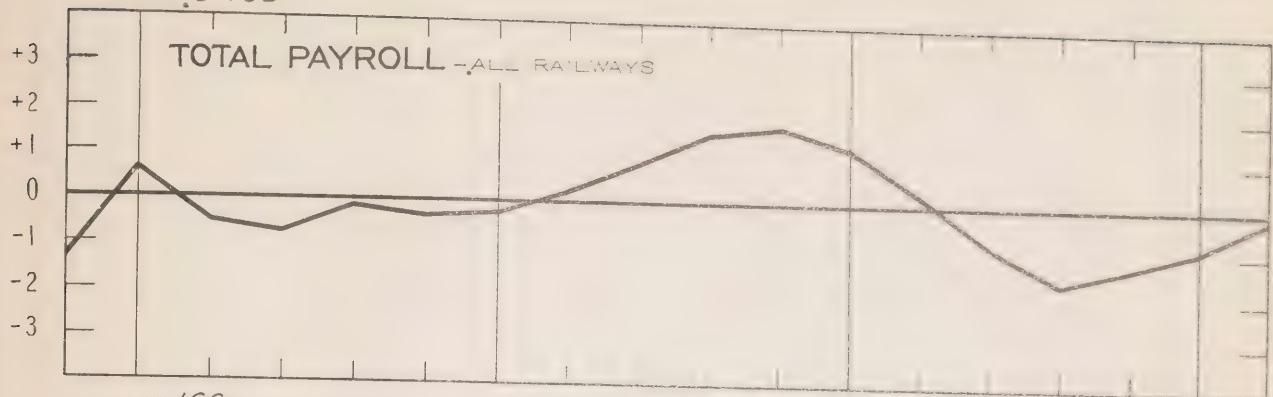
-164



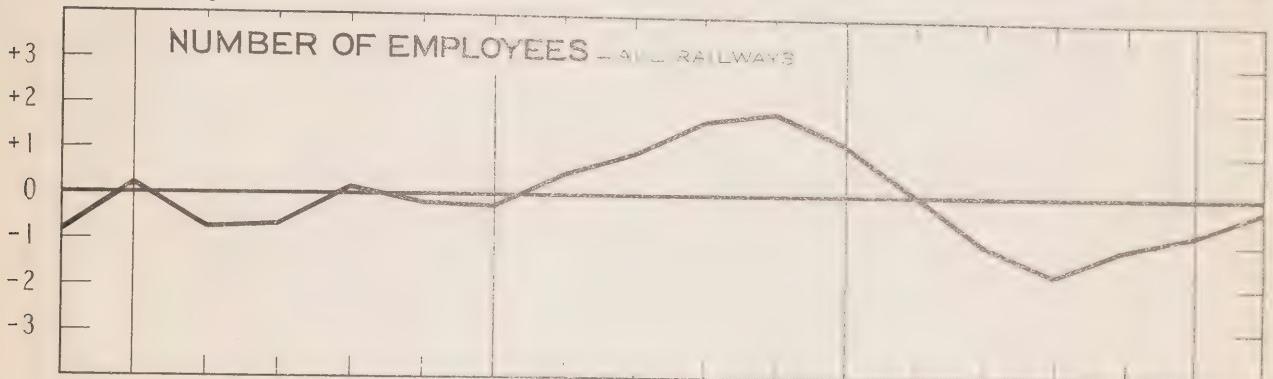
1919 1920 1921 1922 1923 1924 1925 1926 1927 1928 1929 1930 1931 1932 1933 1934 1935 1936

Chart 165

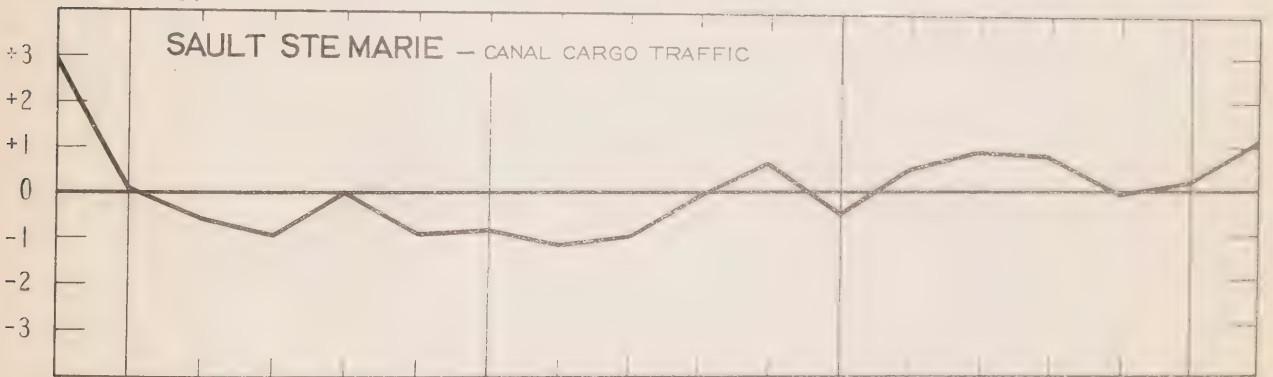
74



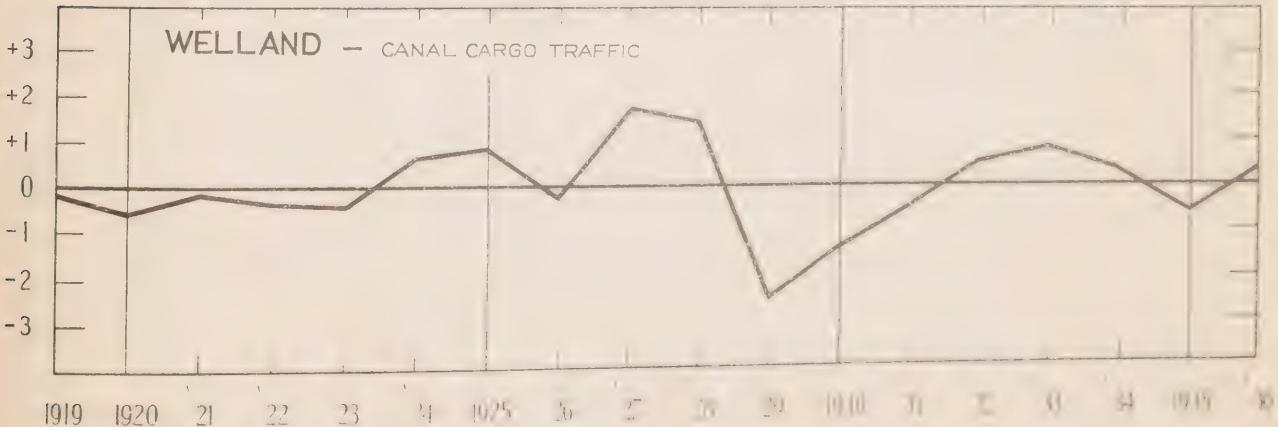
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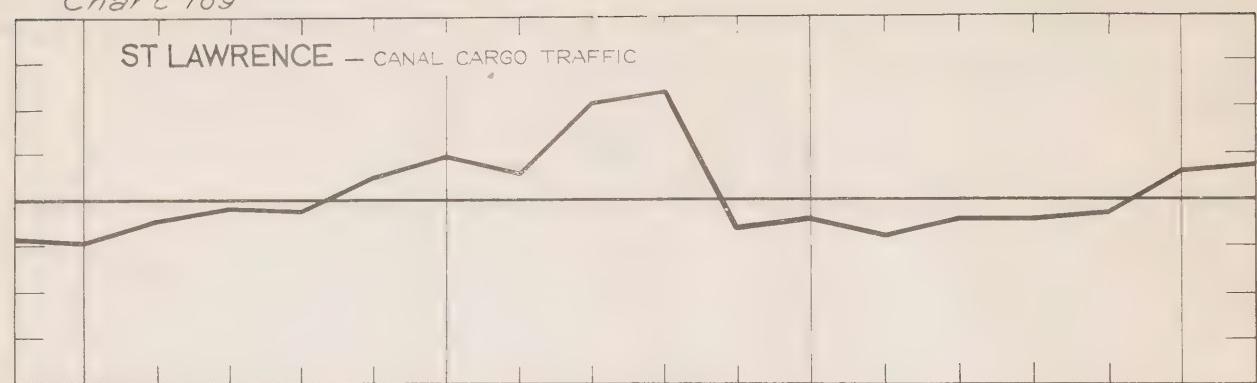
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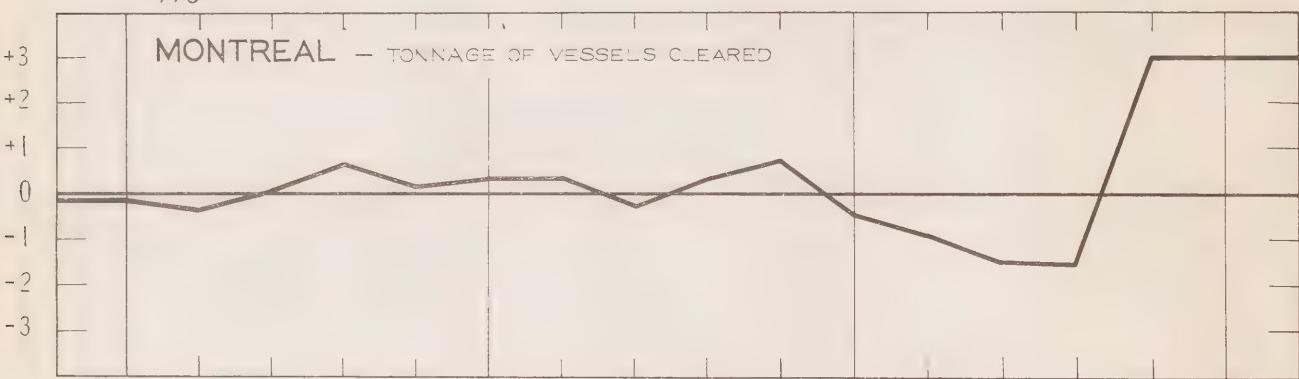
1919 1920 21 22 23 24 1925 26 27 28 29 1929 30 31 32 33 34 1930 35 36 37 38

Chart 169

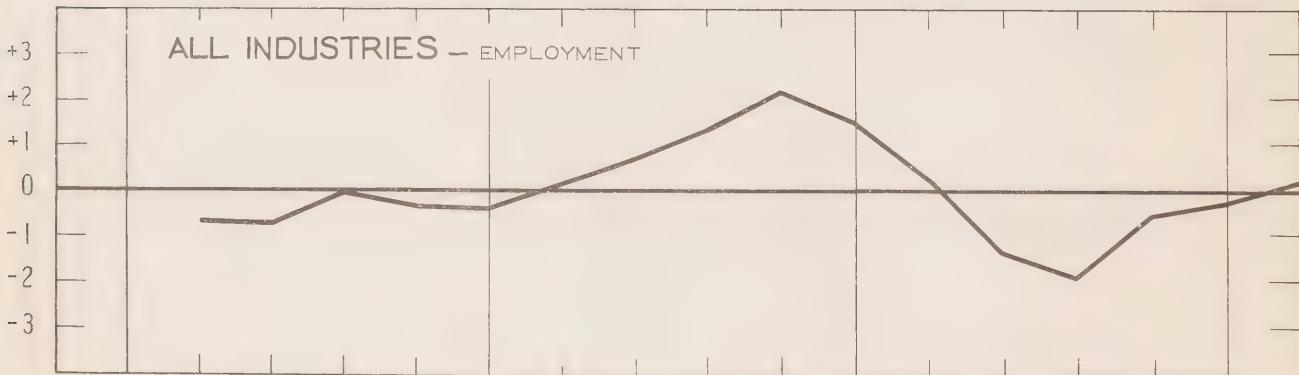
75



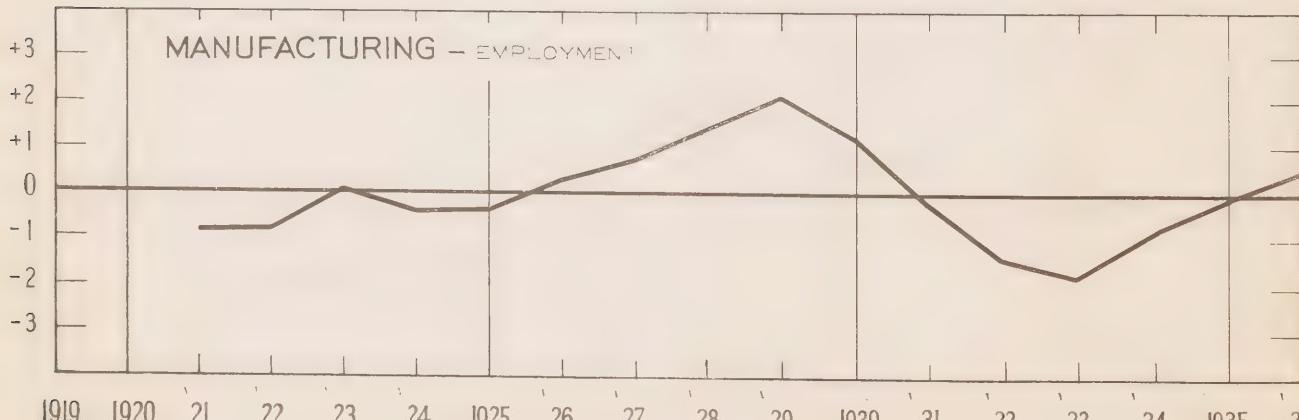
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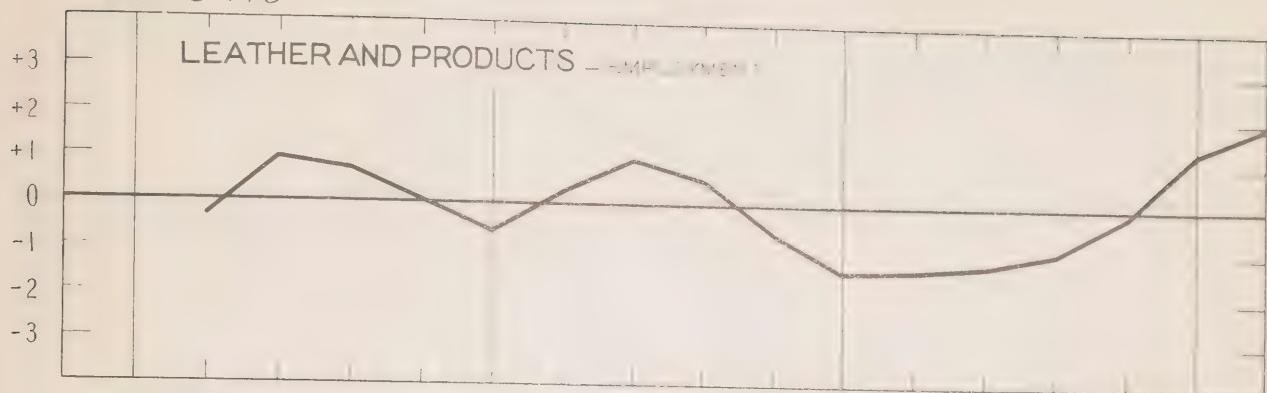


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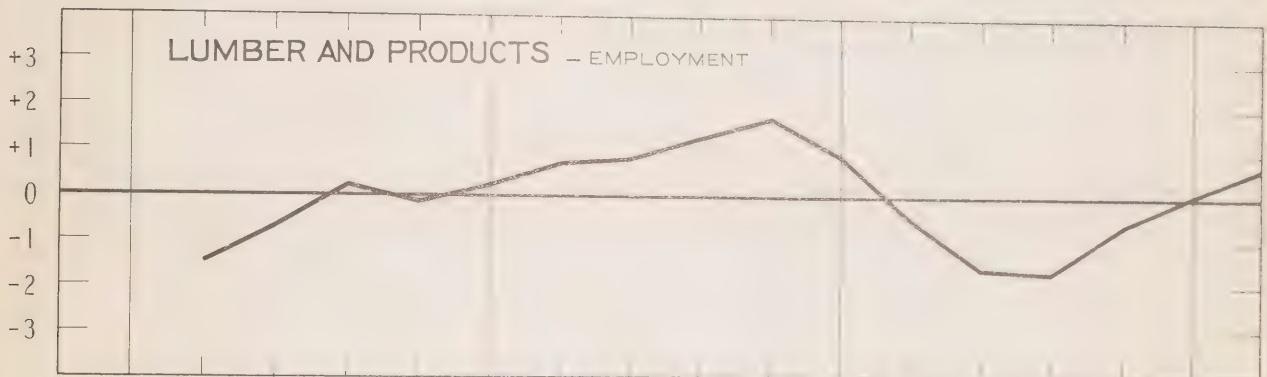


1919 1920 21 22 23 24 1925 26 27 28 29 1930 31 32 33 34 1935 36

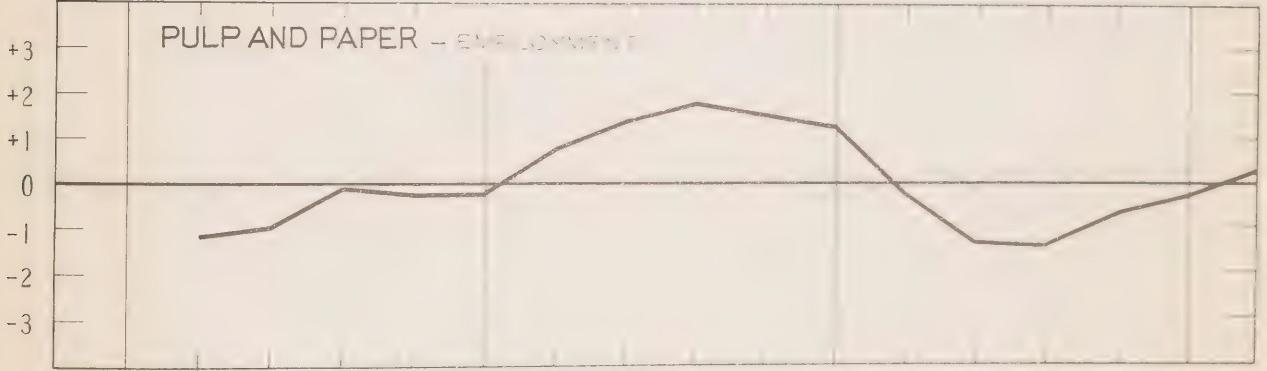
Chart 173



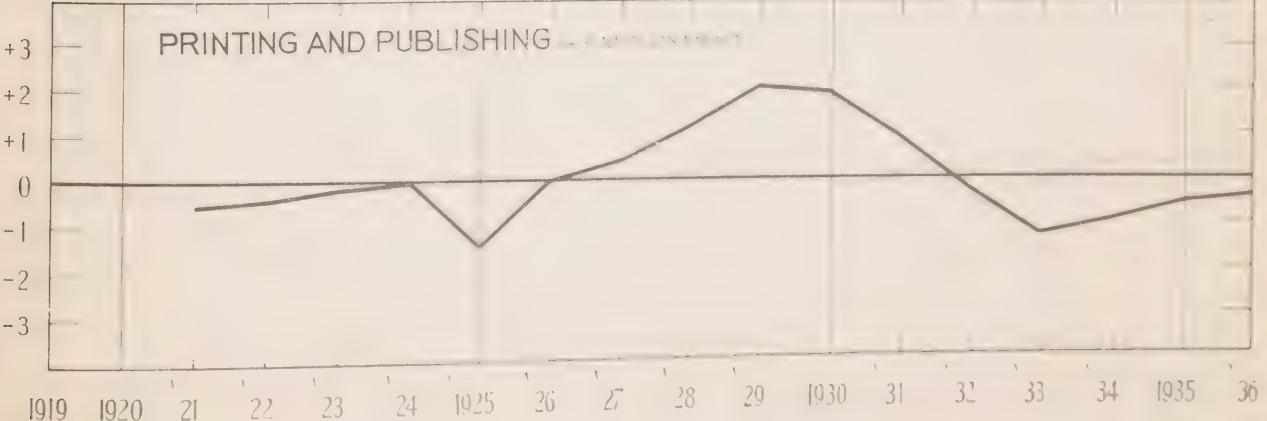
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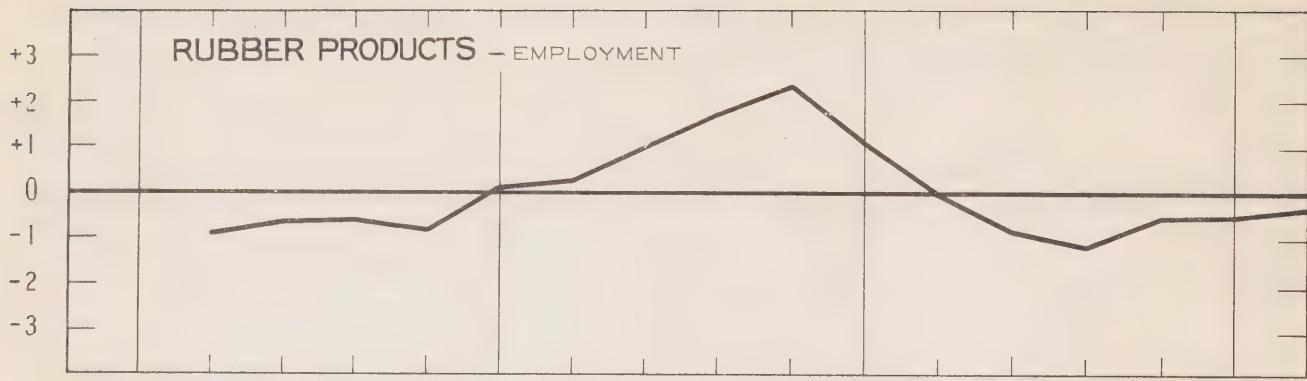


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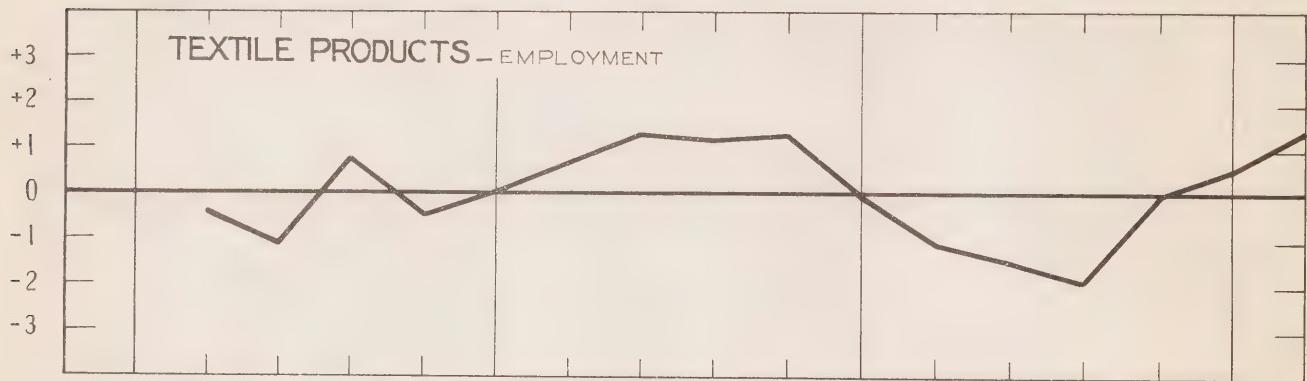


1919 1920 1921 1922 1923 1924 1925 1926 1927 1928 1929 1930 1931 1932 1933 1934 1935 1936

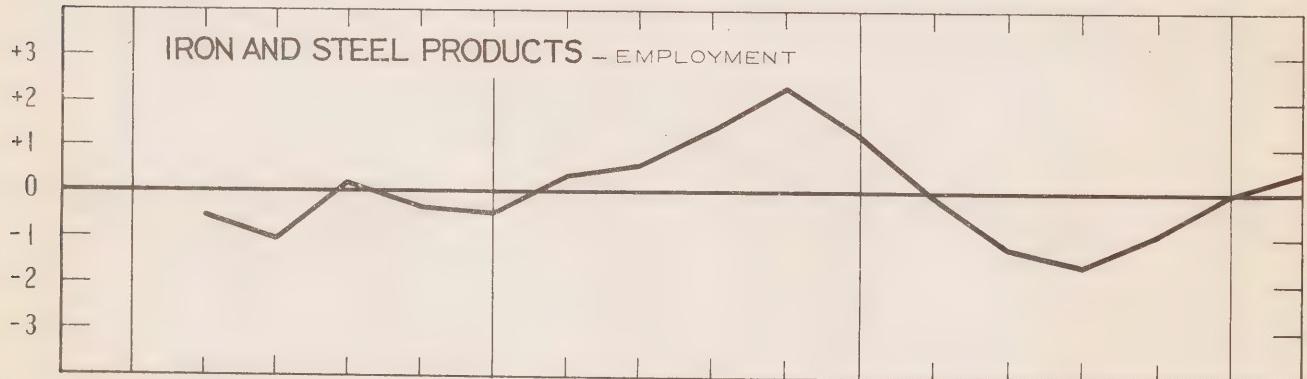
Chart 177



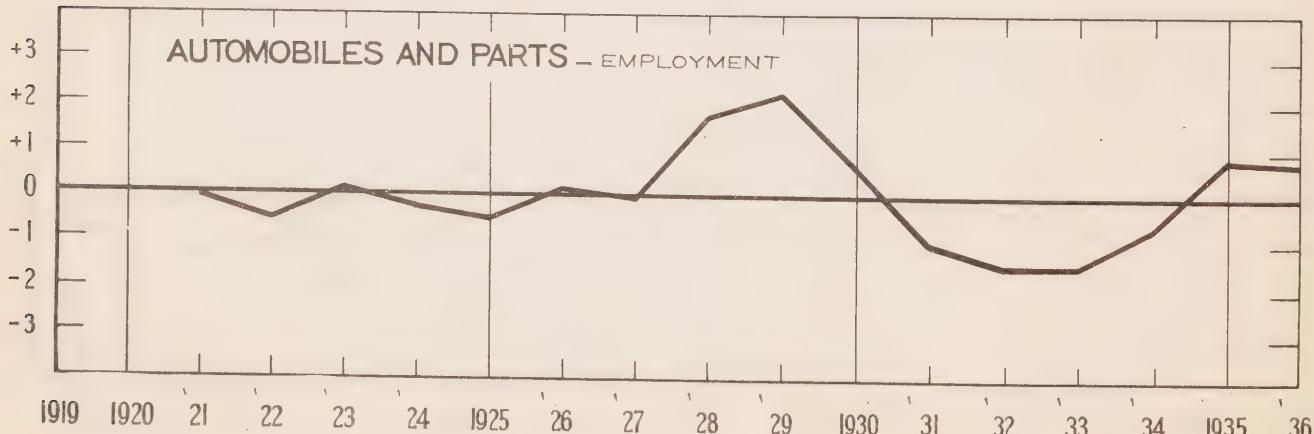
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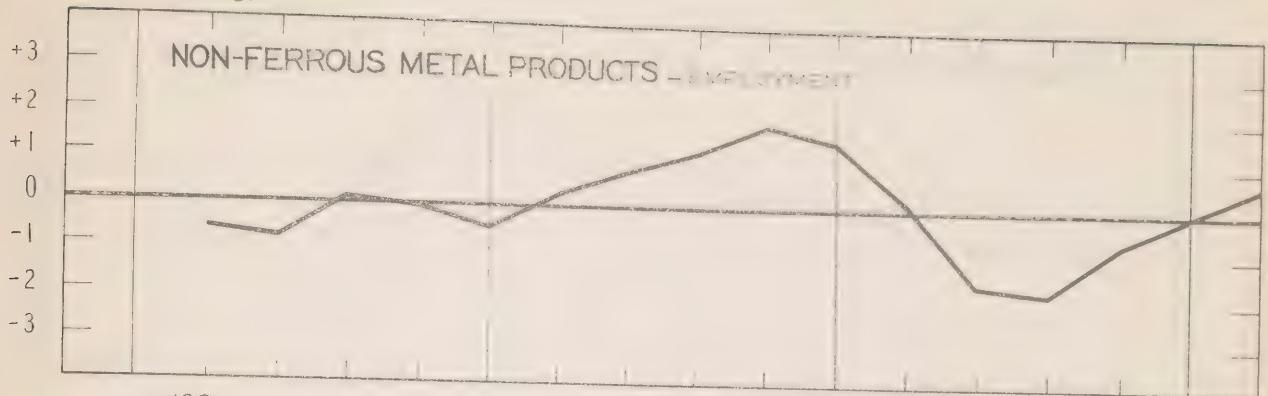


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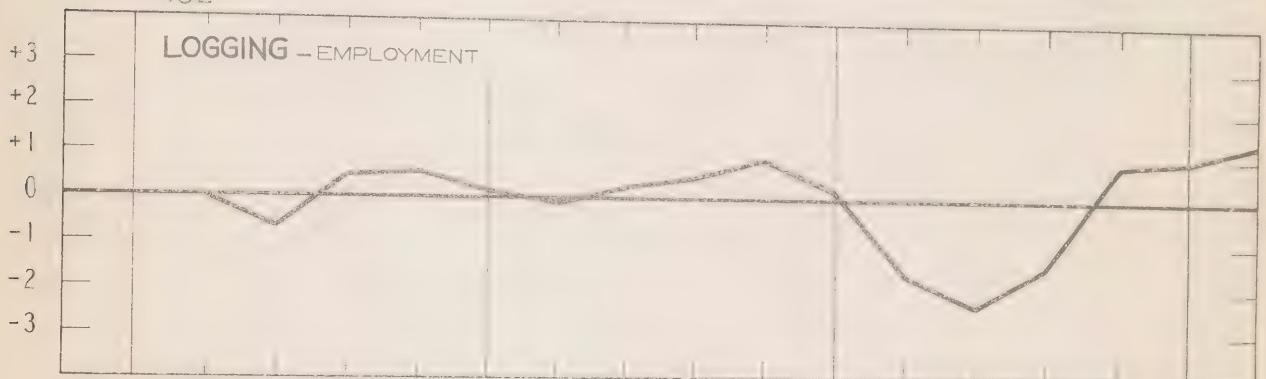


1919 1920 21 22 23 24 1925 26 27 28 29 1930 31 32 33 34 1935 36

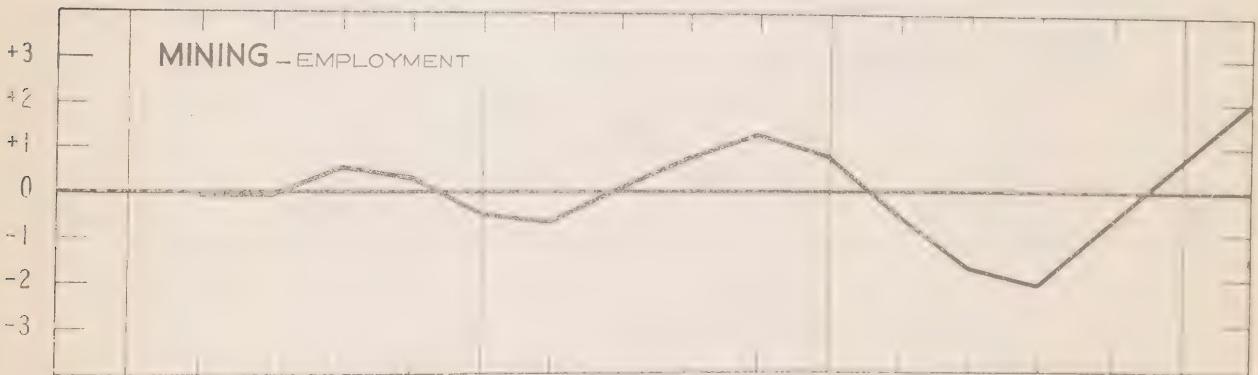
Chart 181



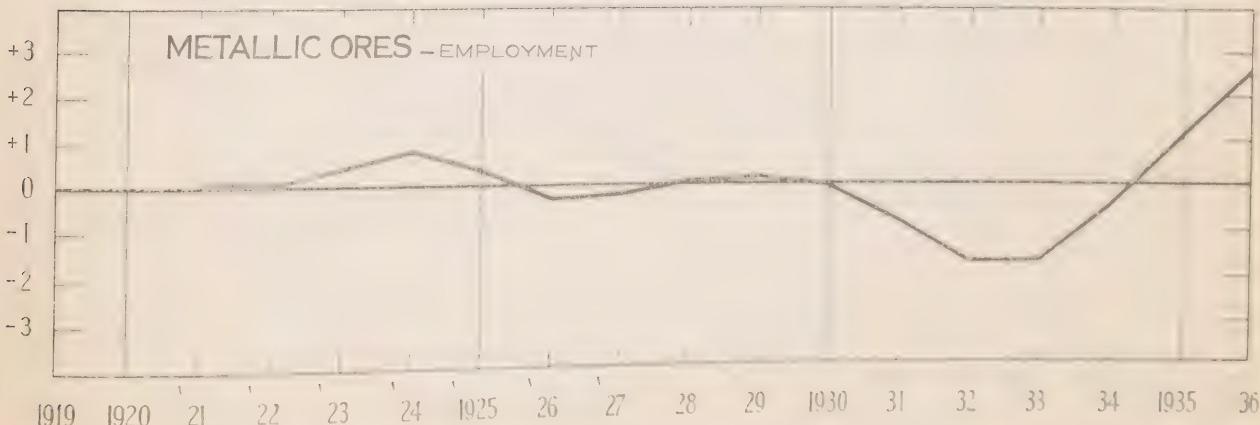
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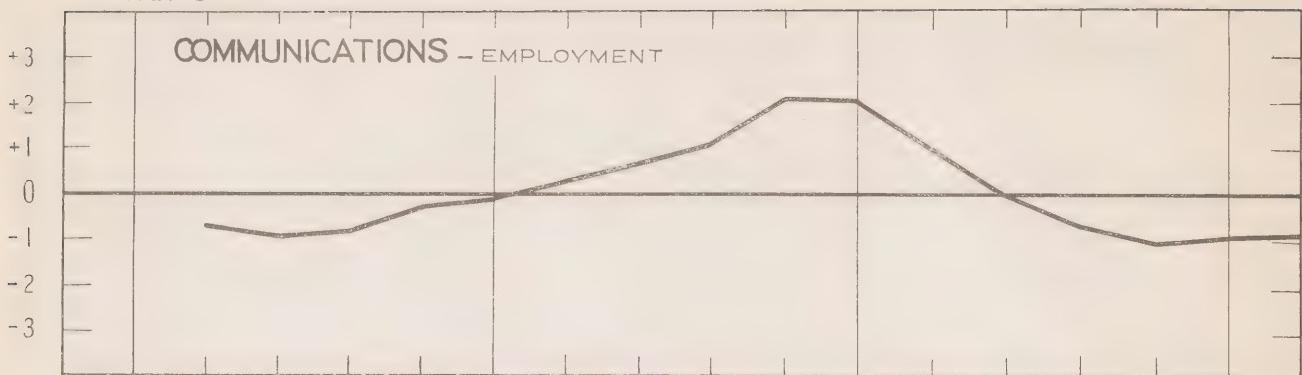


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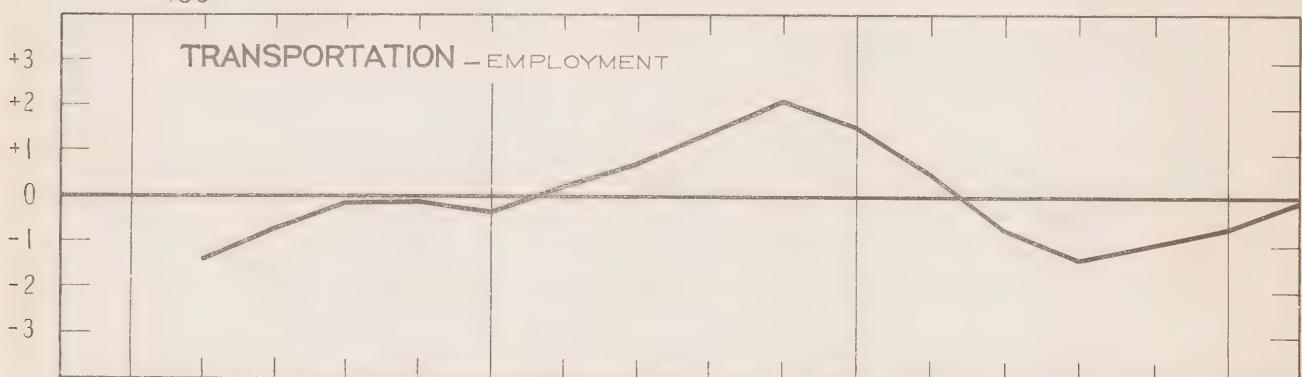


1919 1920 21 22 23 24 1925 26 27 28 29 1930 31 32 33 34 1935 36

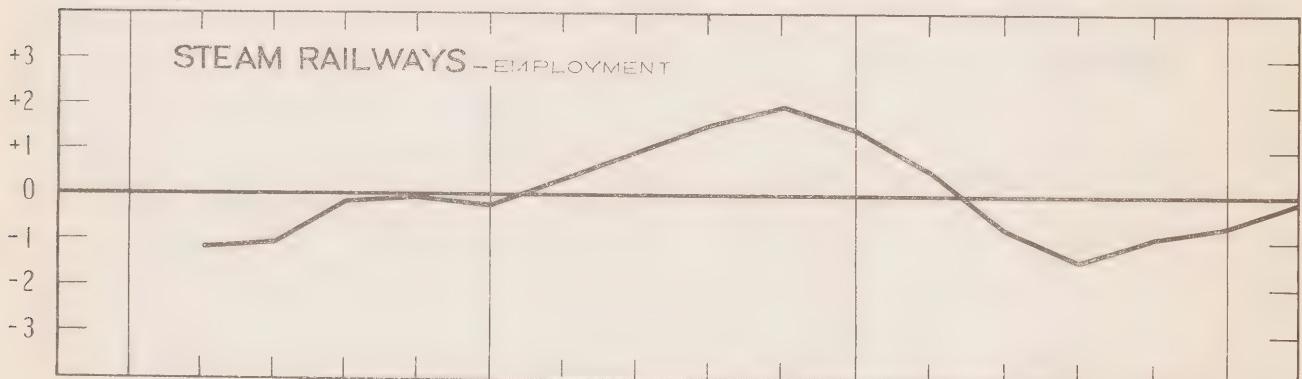
Chart 185



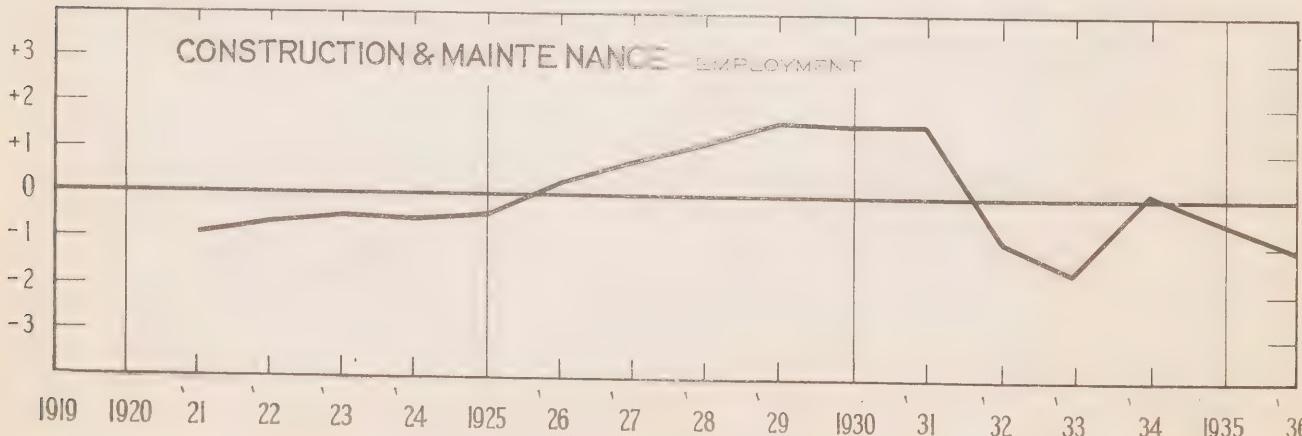
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1919 1920 1921 1922 1923 1924 1925 1926 1927 1928 1929 1930 1931 1932 1933 1934 1935 1936

Chart 189

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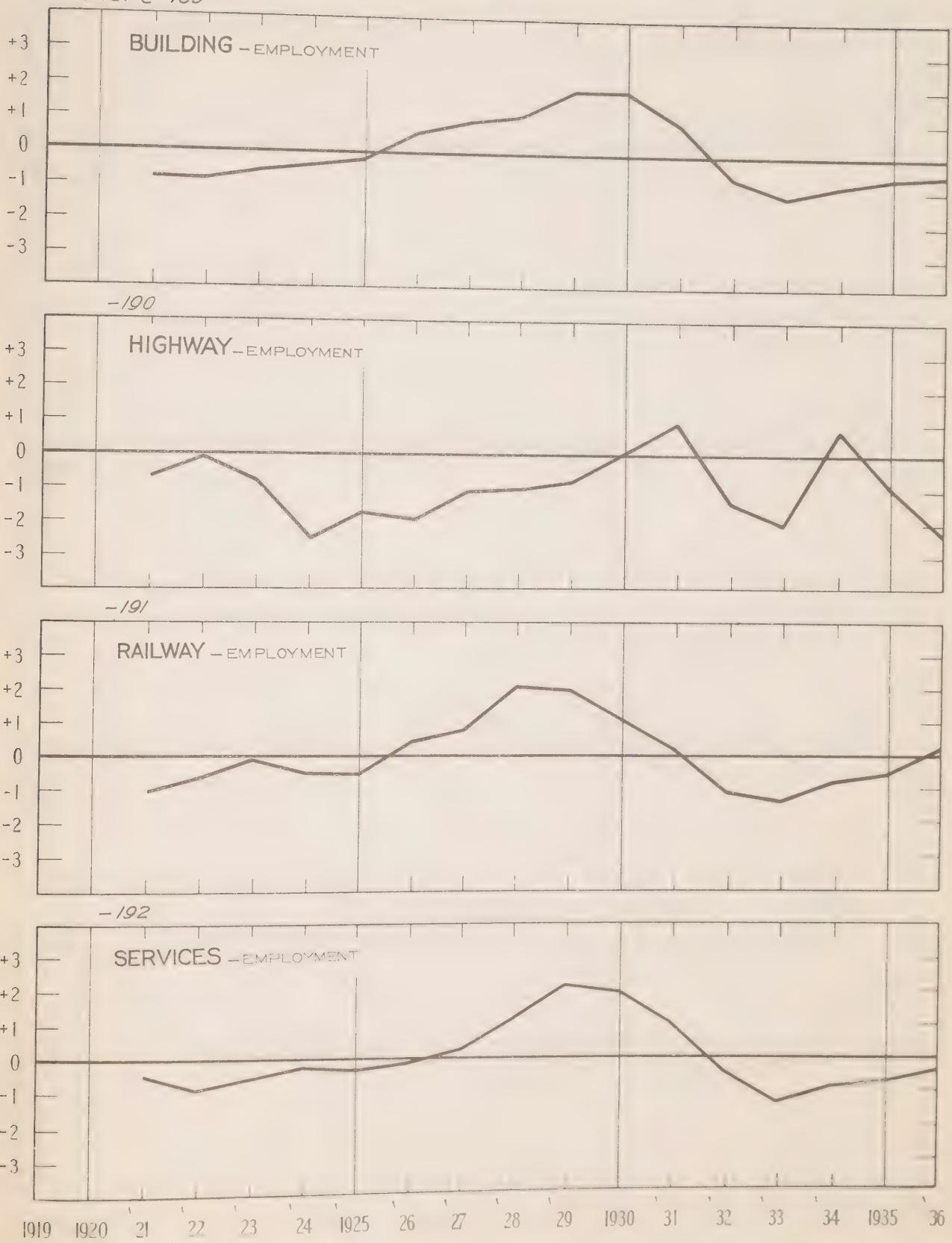


Chart 193

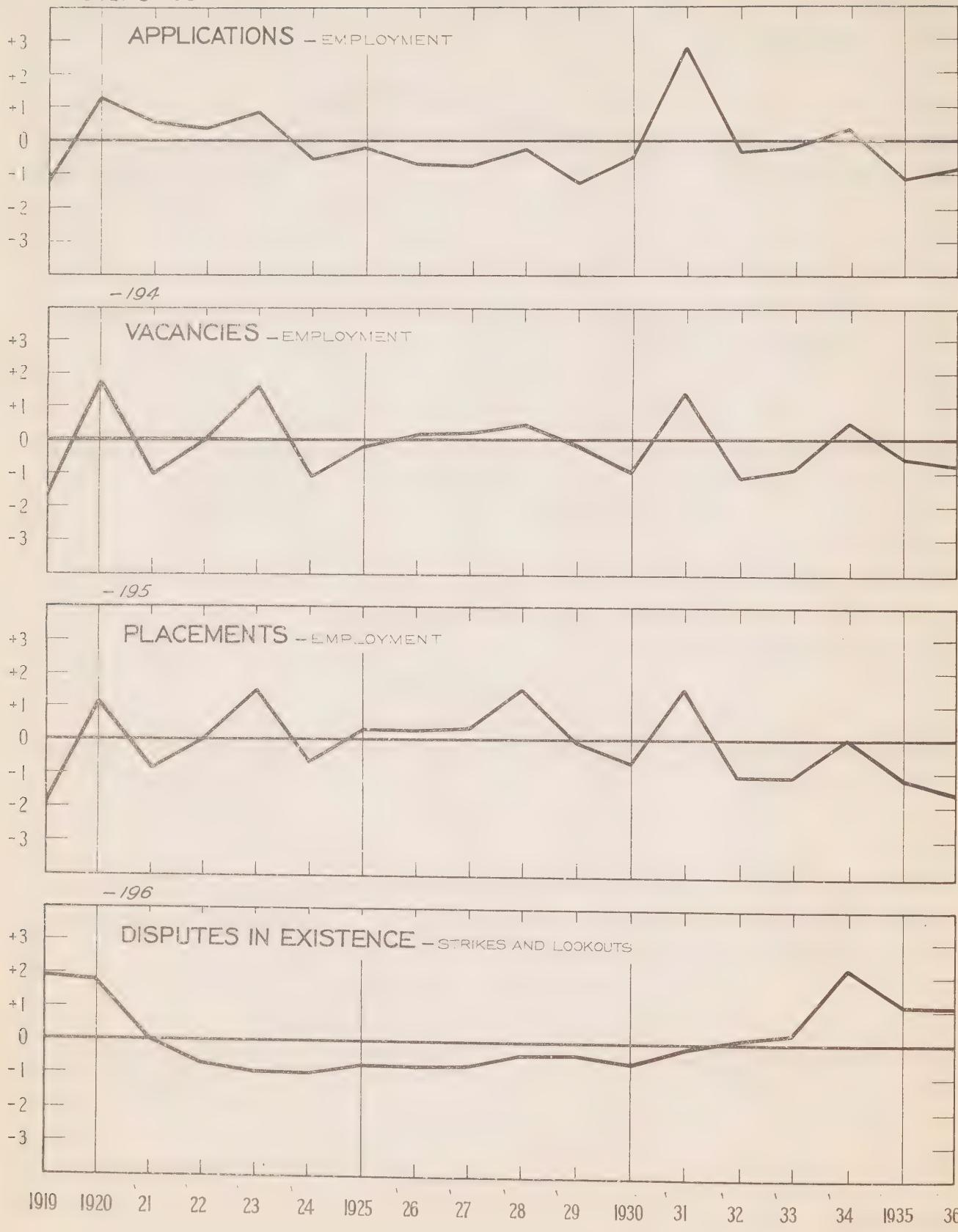
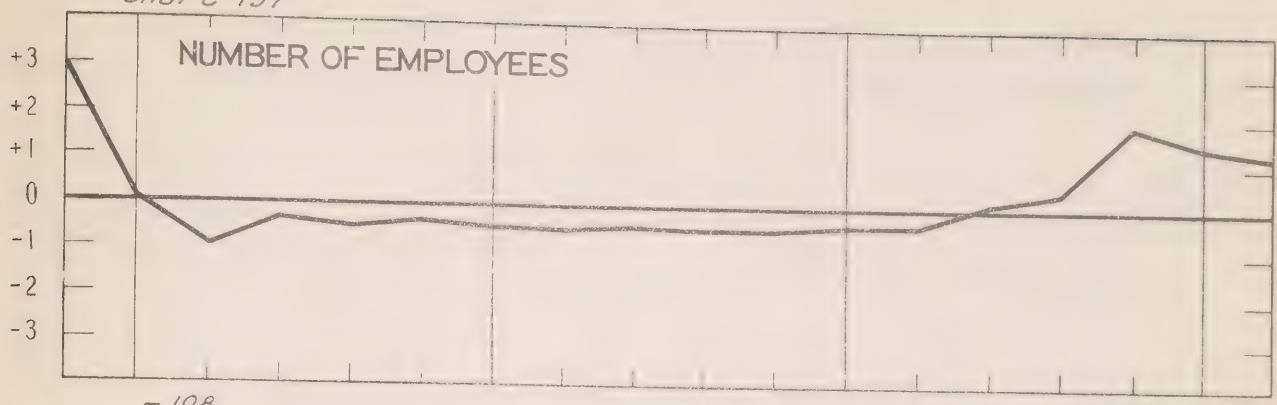
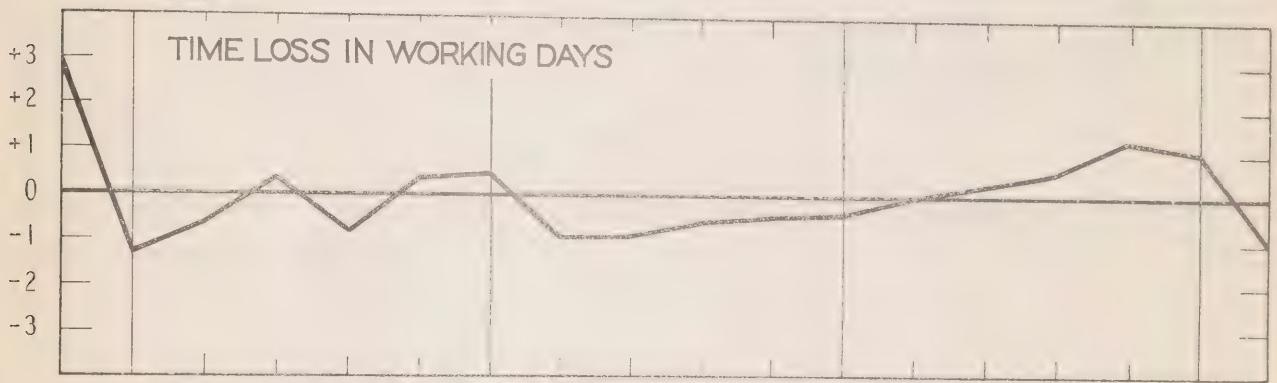


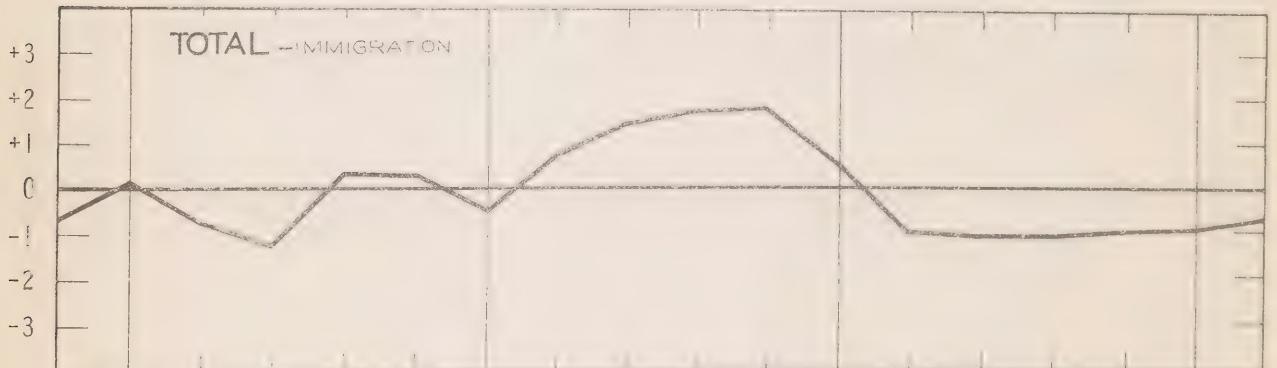
Chart 197



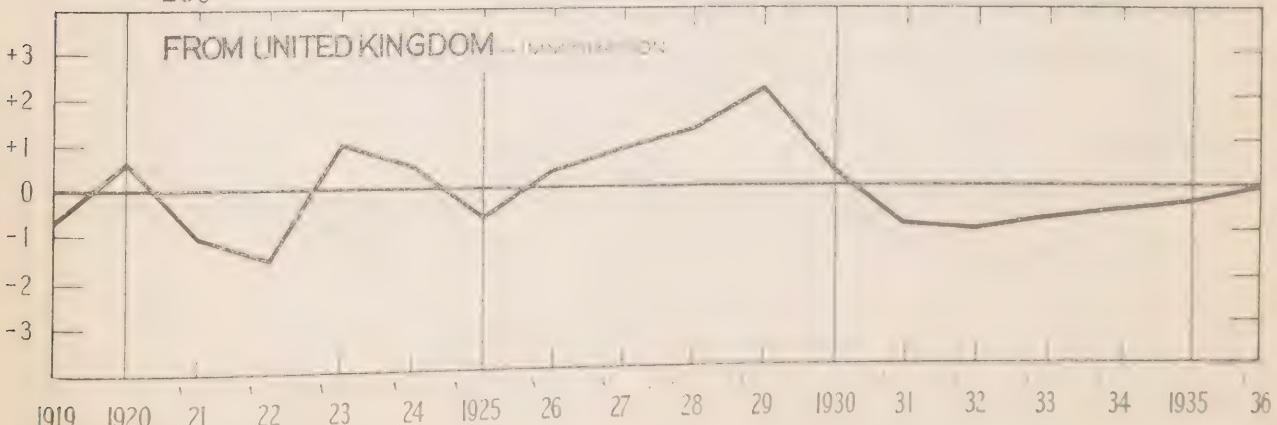
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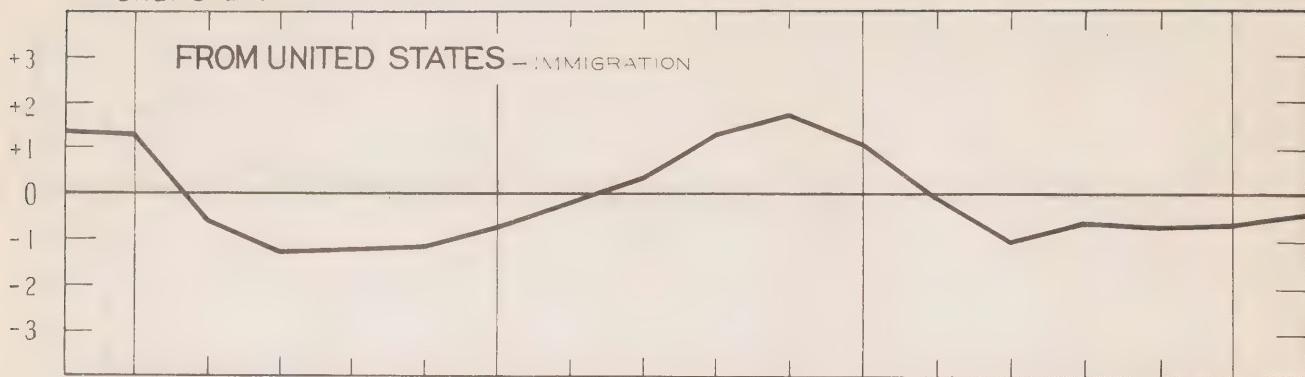


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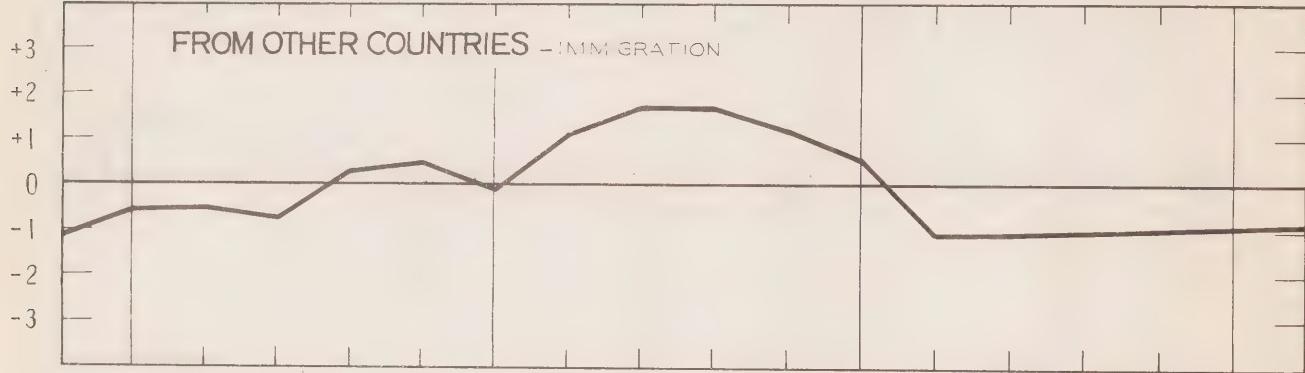


1919 1920 21 22 23 24 1925 26 27 28 29 1930 31 32 33 34 1935 36

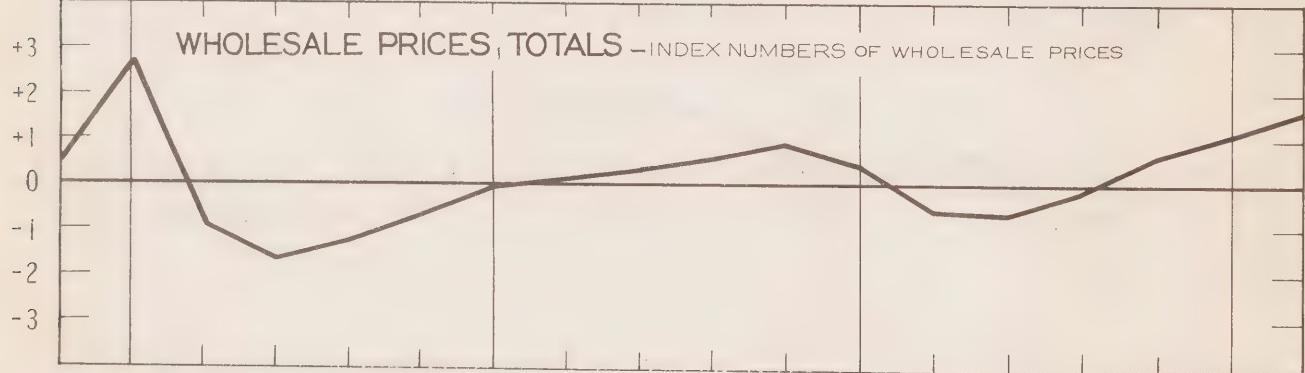
Chart 201



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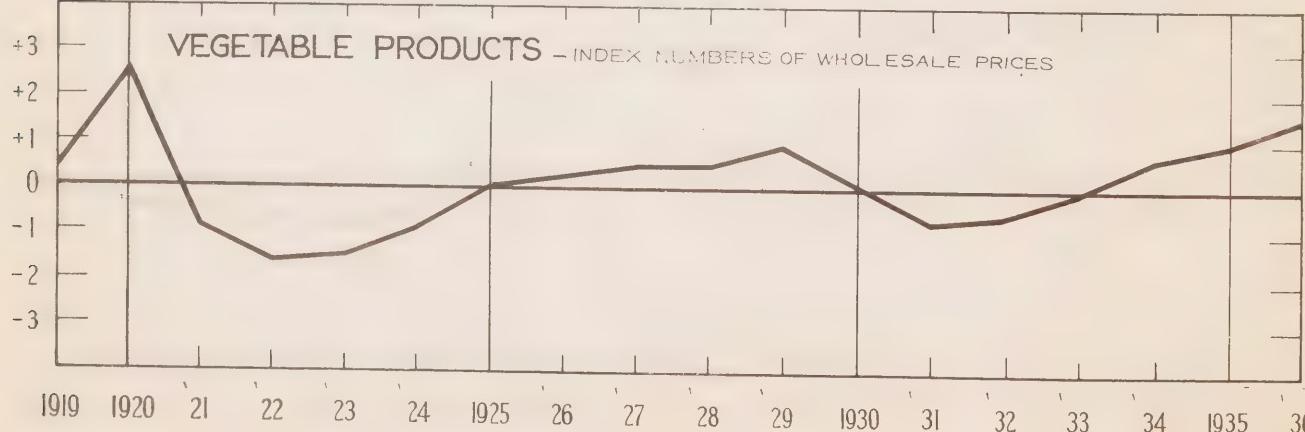
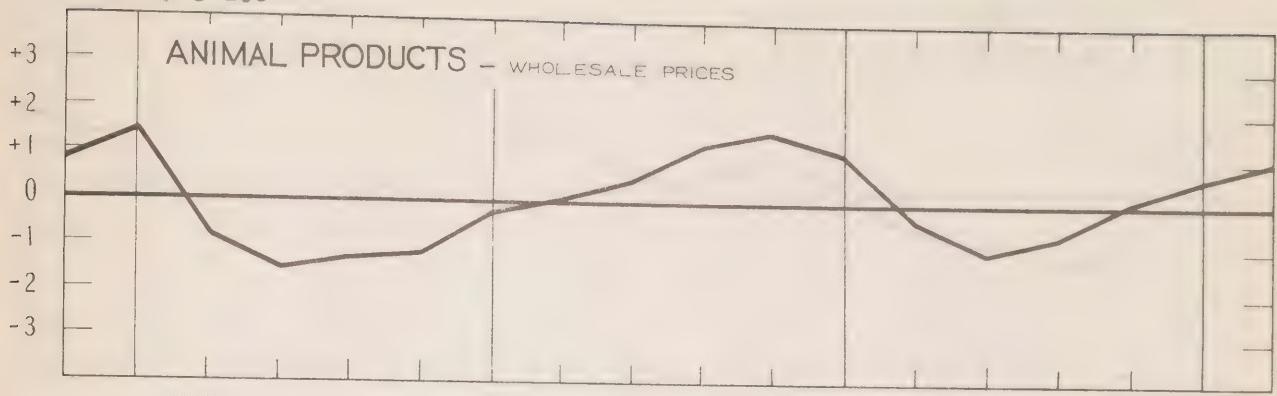
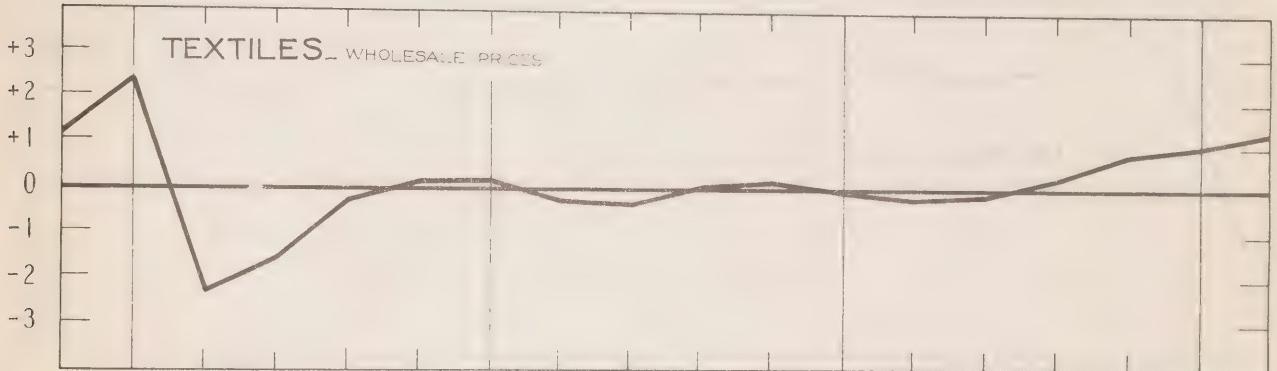


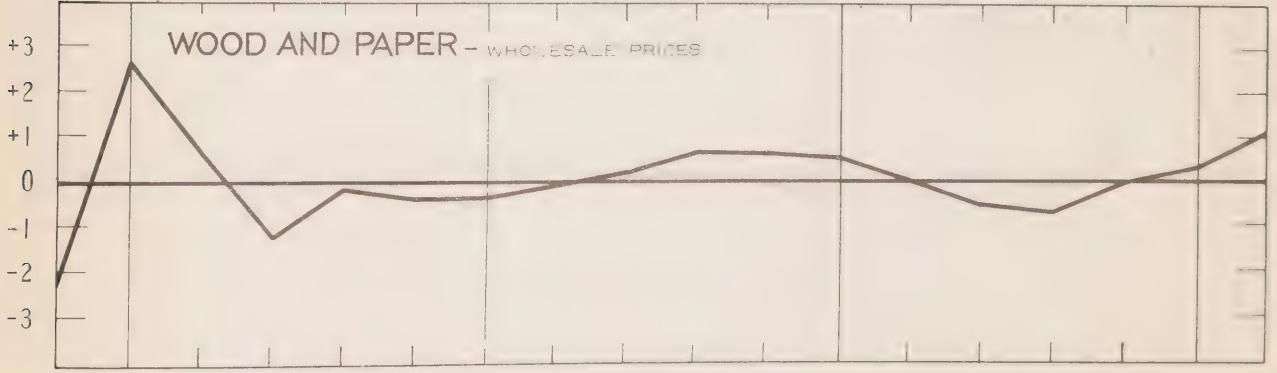
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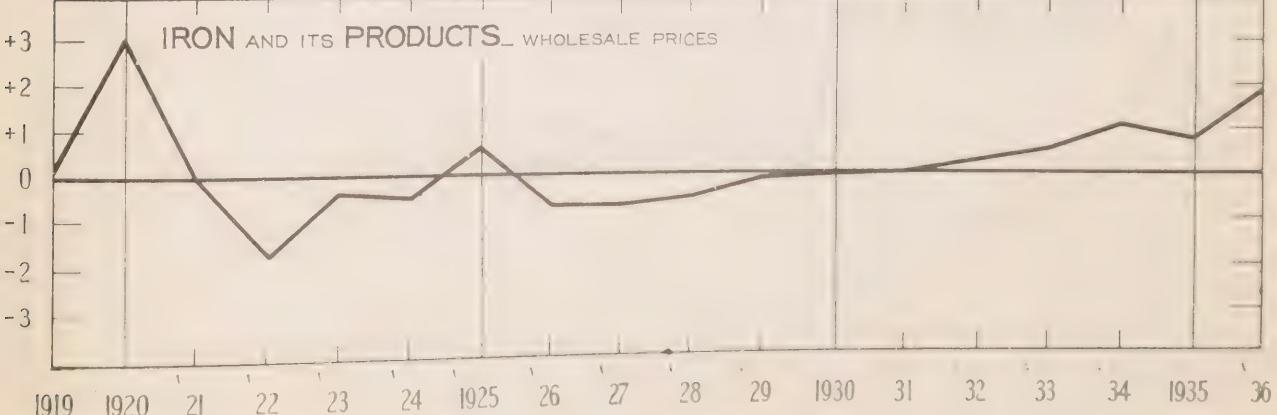
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1919 1920 1921 1922 1923 1924 1925 1926 1927 1928 1929 1930 1931 1932 1933 1934 1935 1936

Chart 209

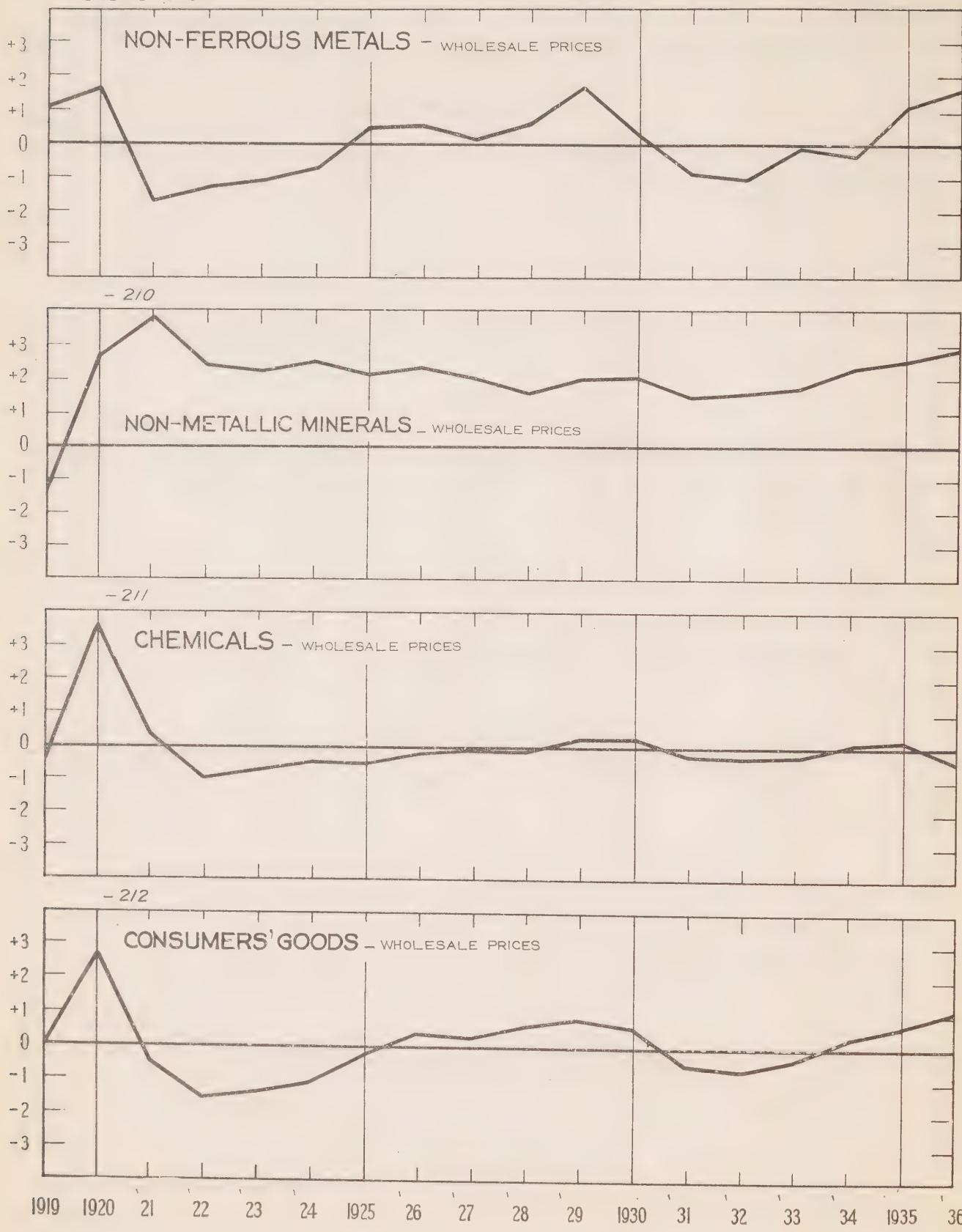
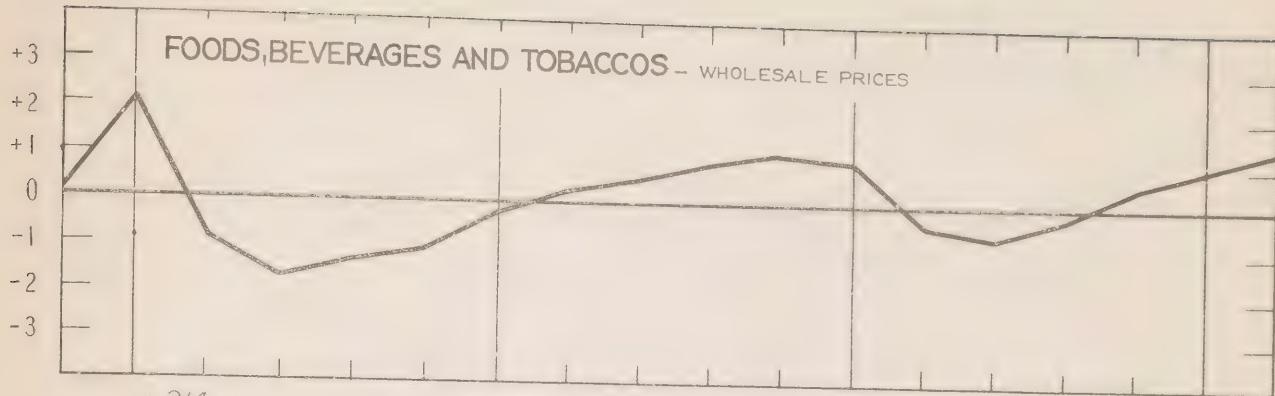
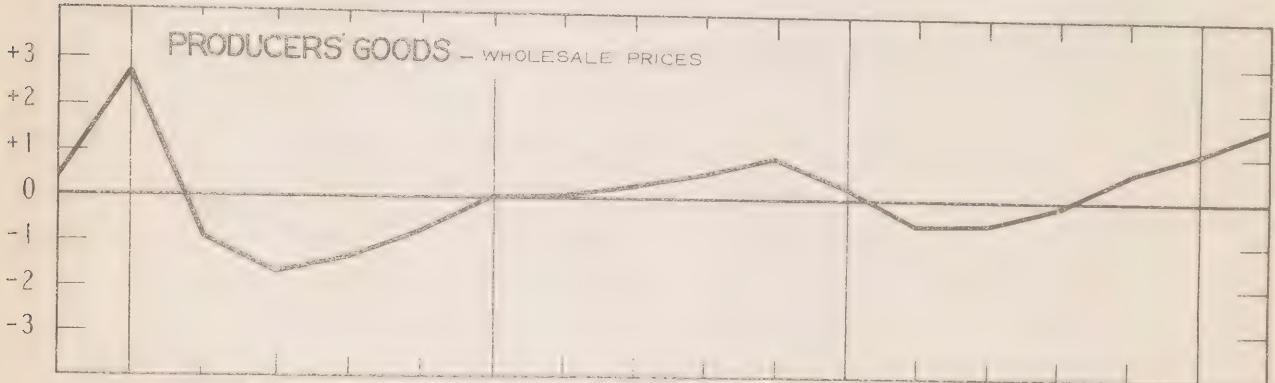


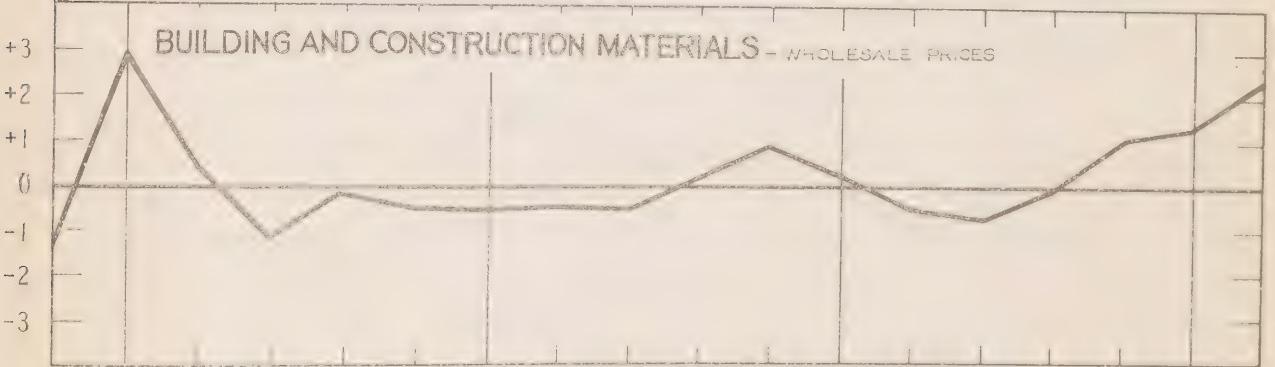
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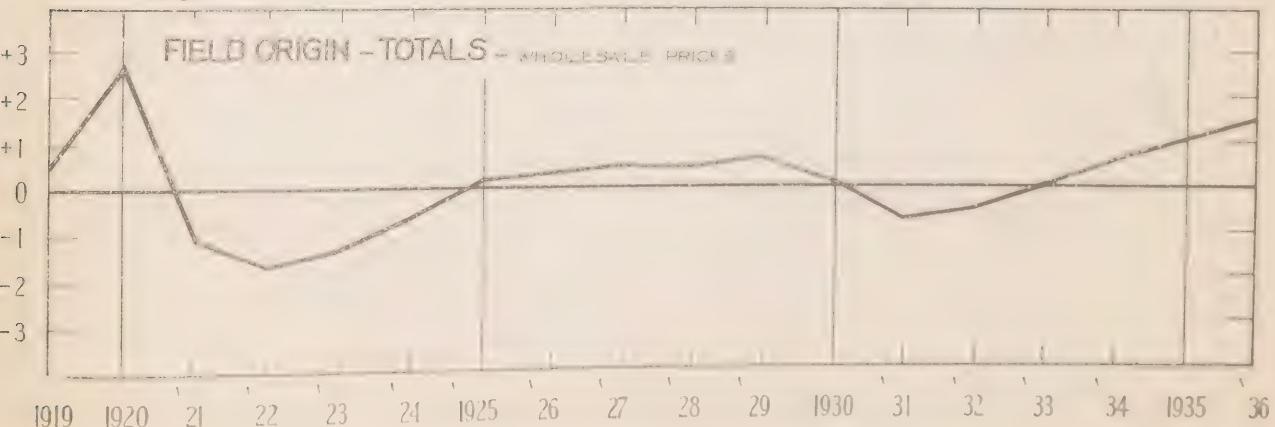
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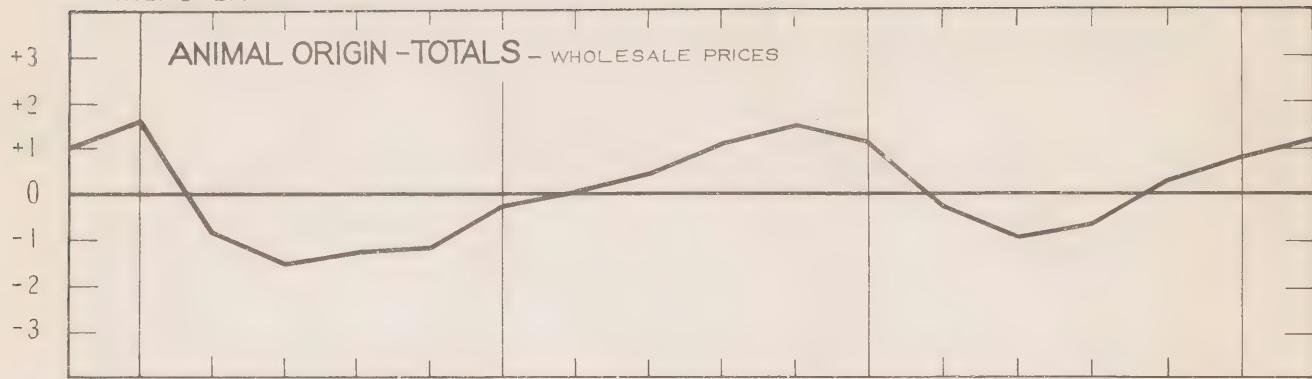


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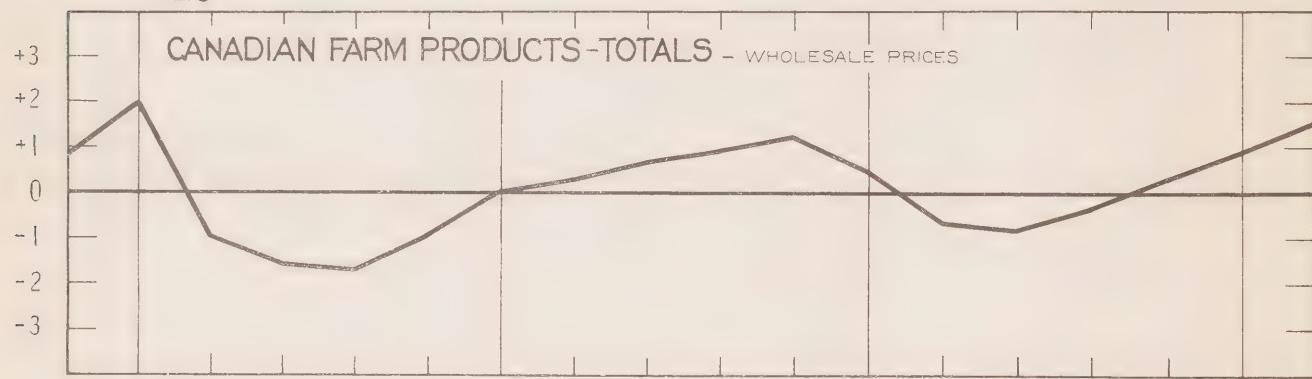


1919 1920 1921 1922 1923 1924 1925 1926 1927 1928 1929 1930 1931 1932 1933 1934 1935 1936

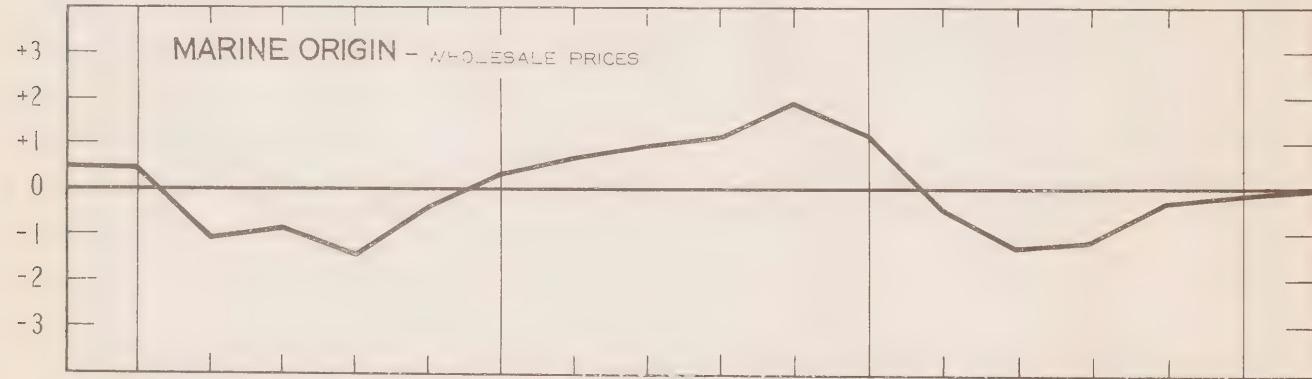
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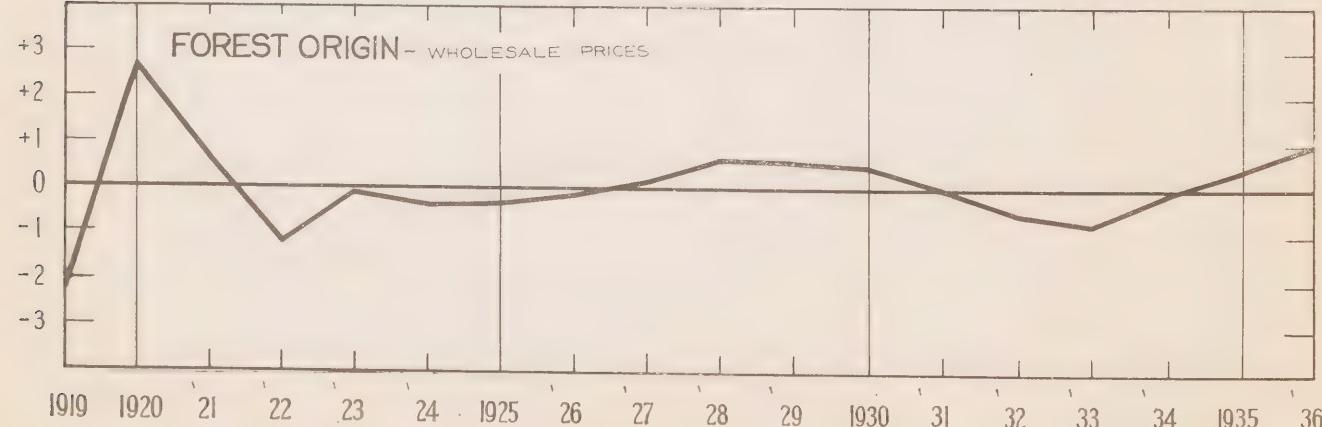
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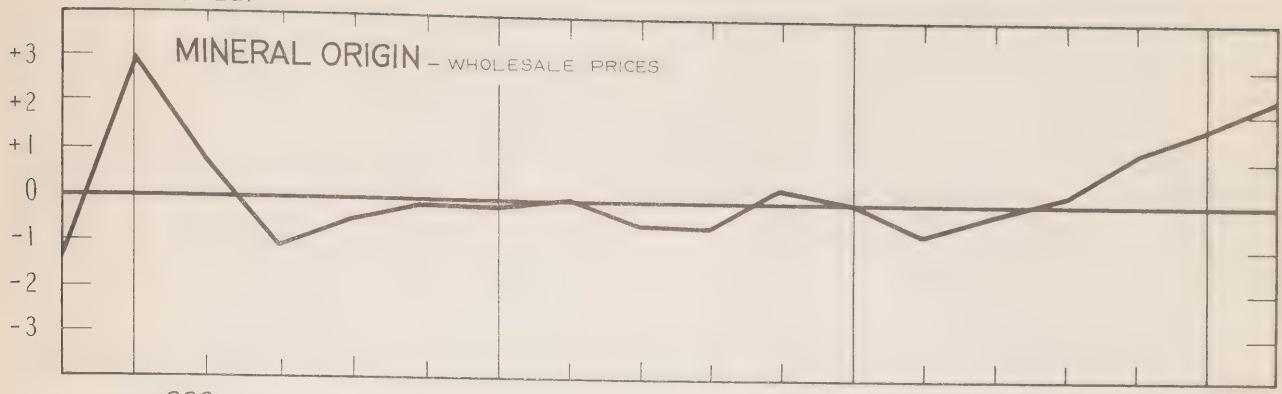


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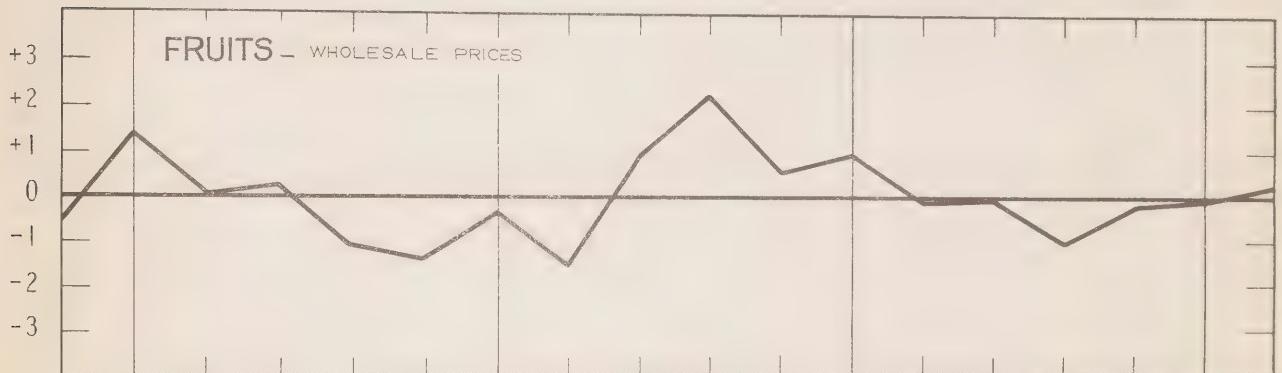


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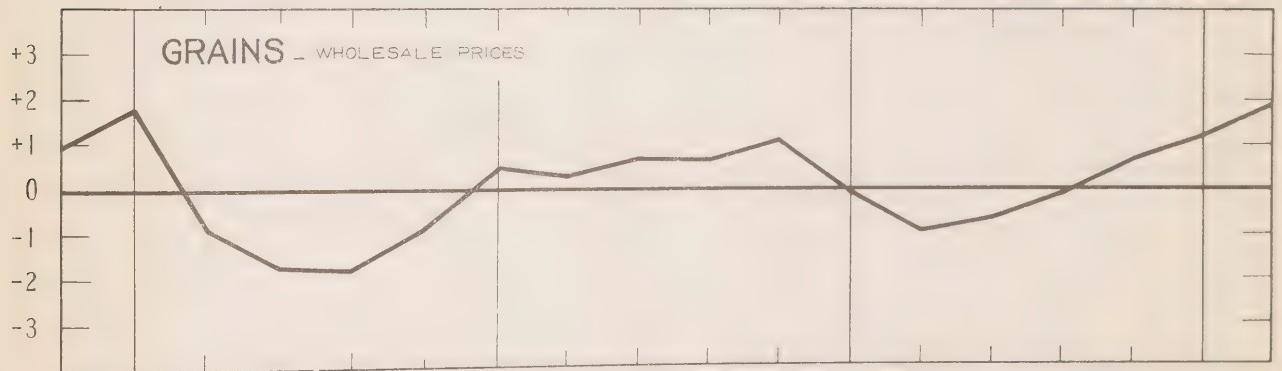
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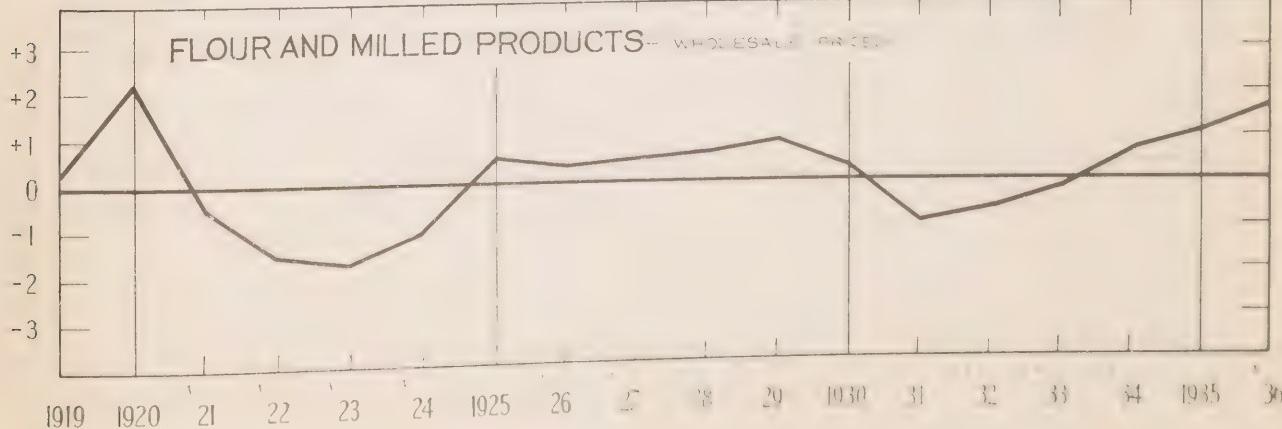
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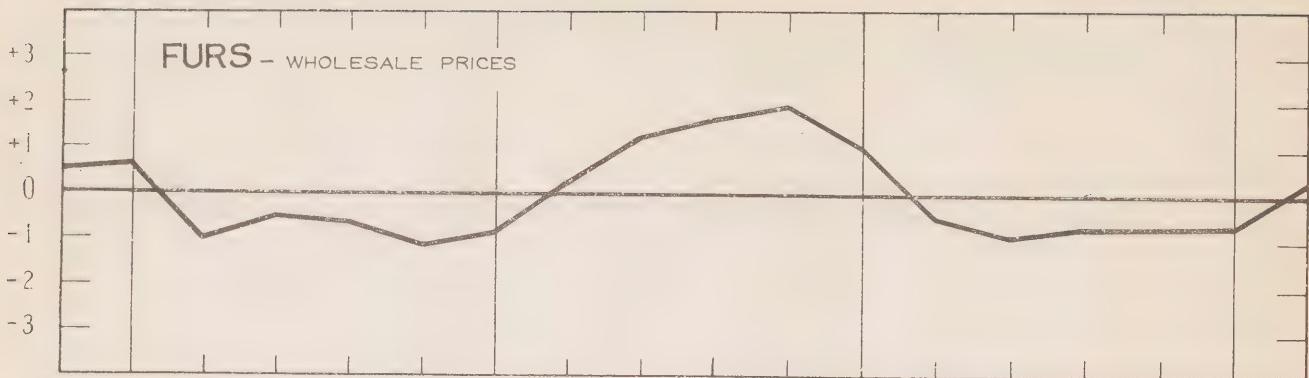


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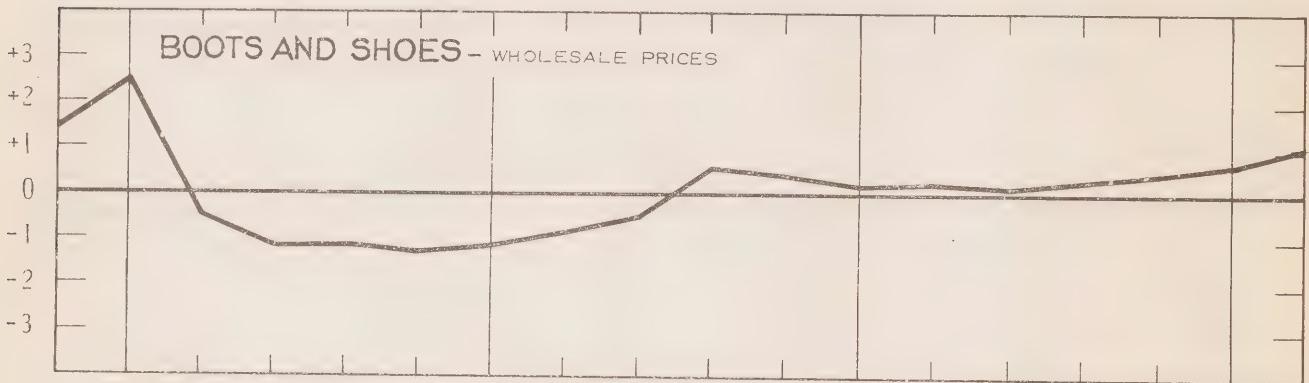


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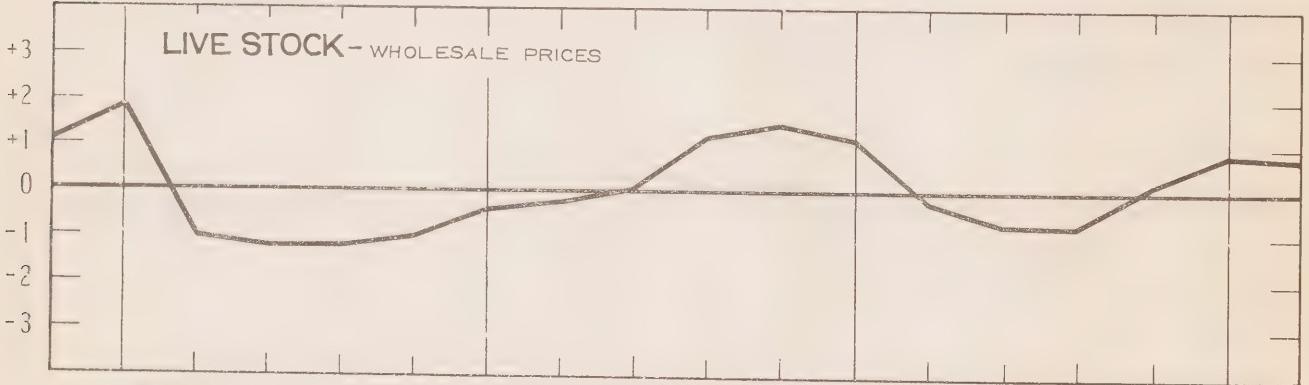
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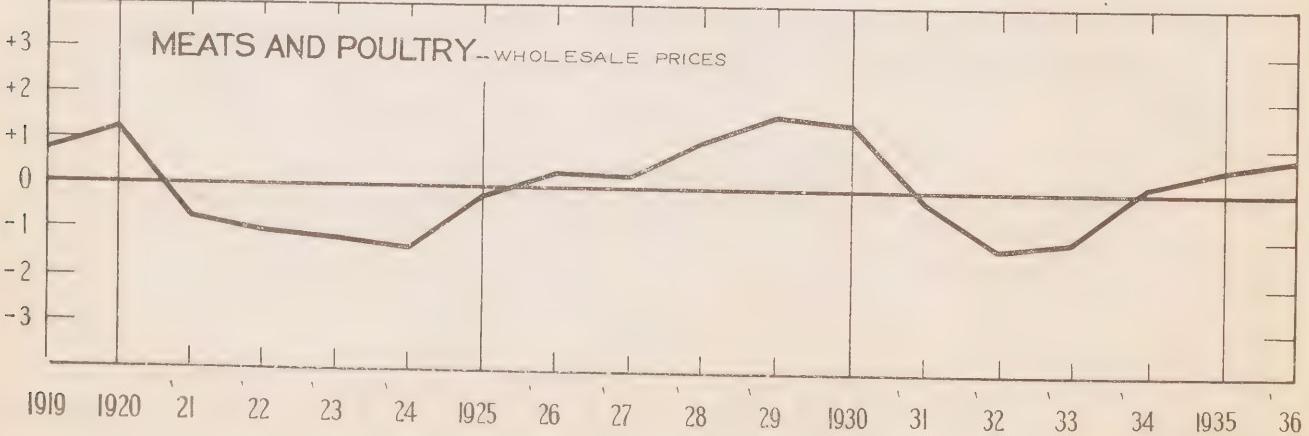
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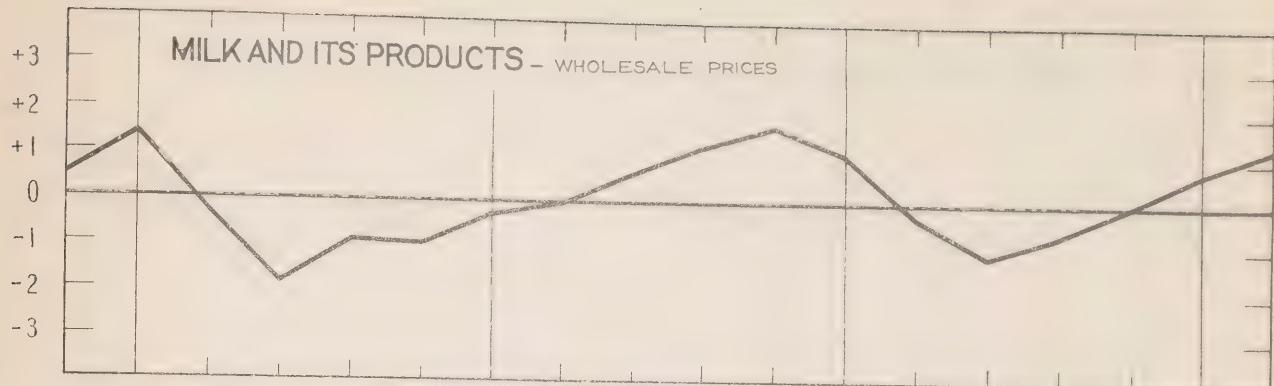


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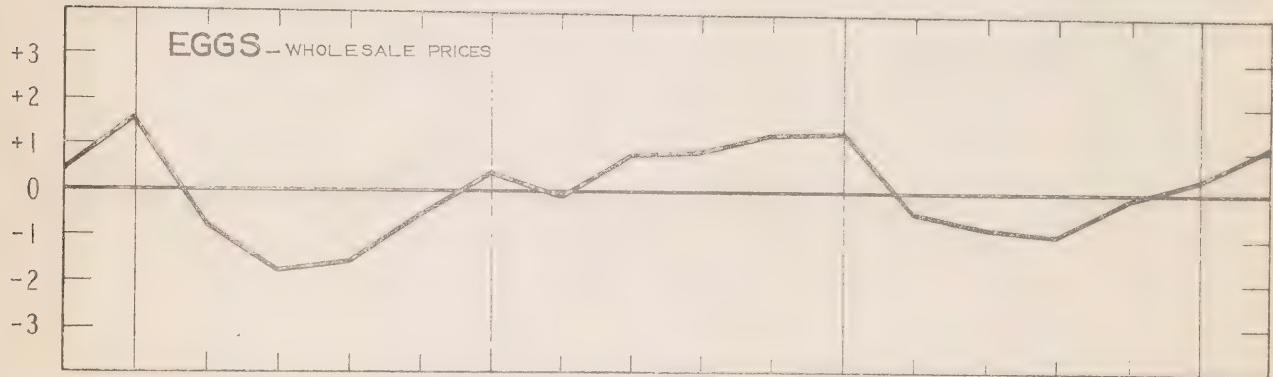


1919 1920 21 22 23 24 1925 26 27 28 29 1930 31 32 33 34 1935 36

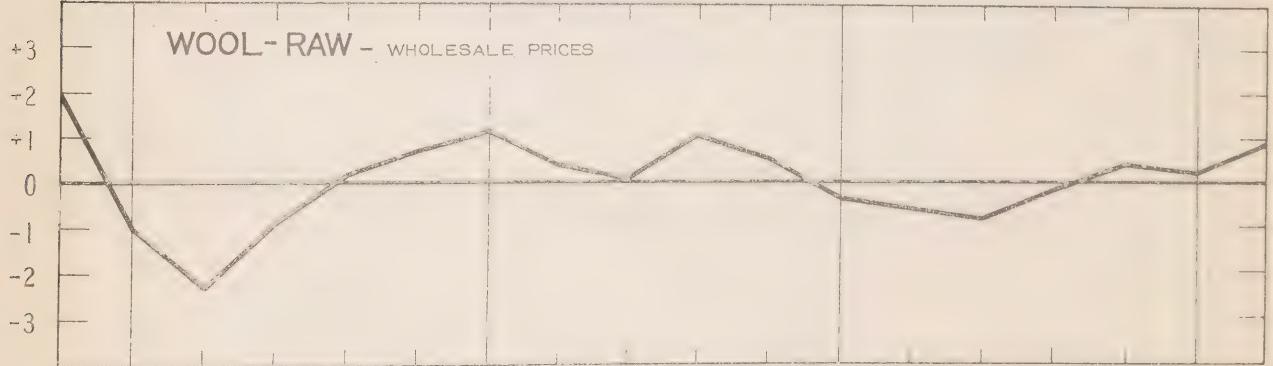
Chart 229



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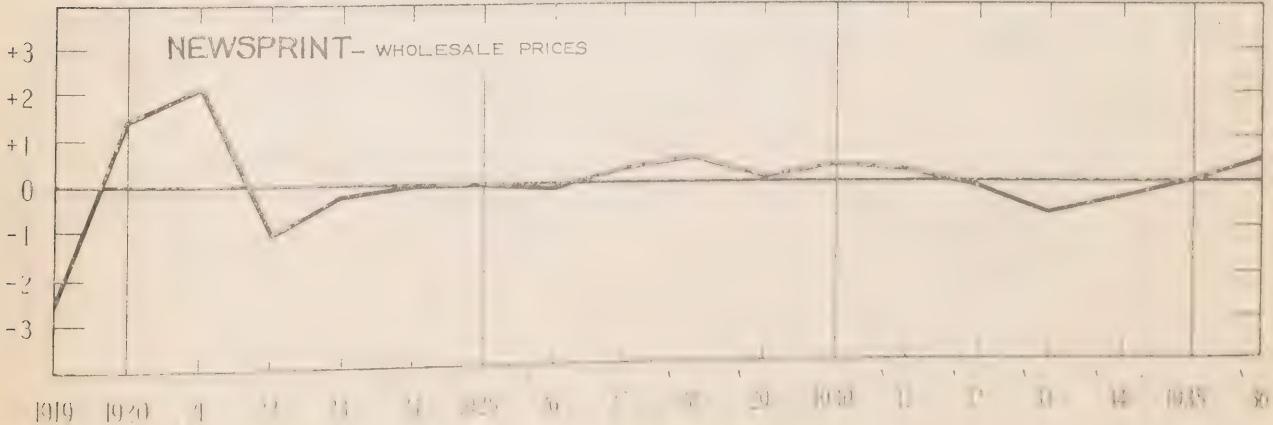
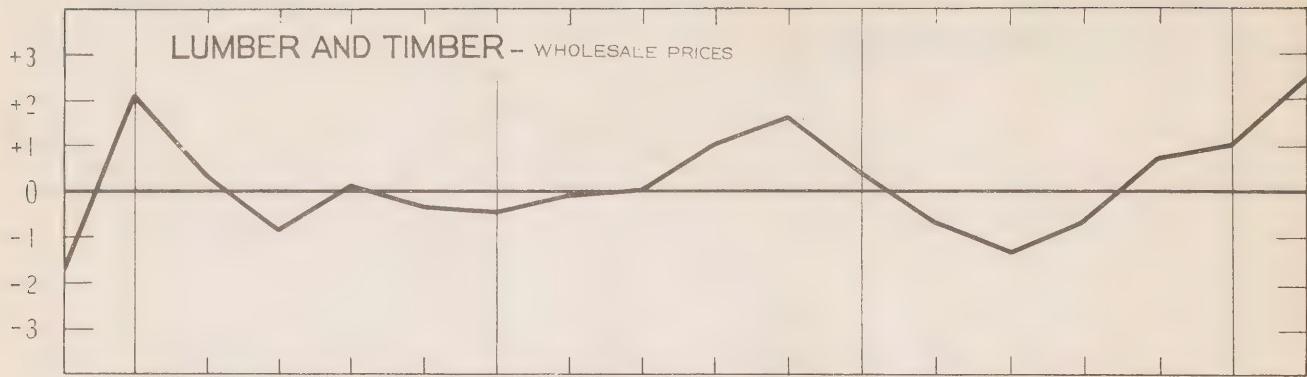
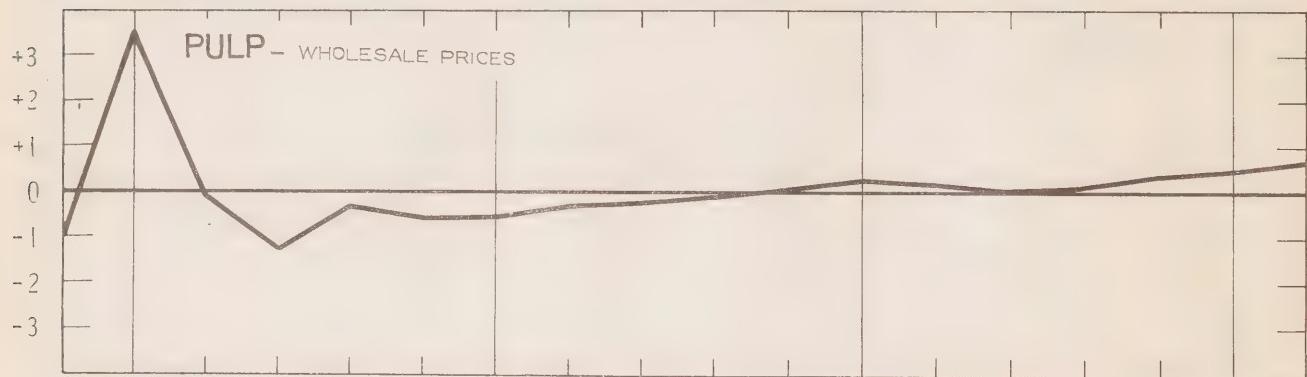


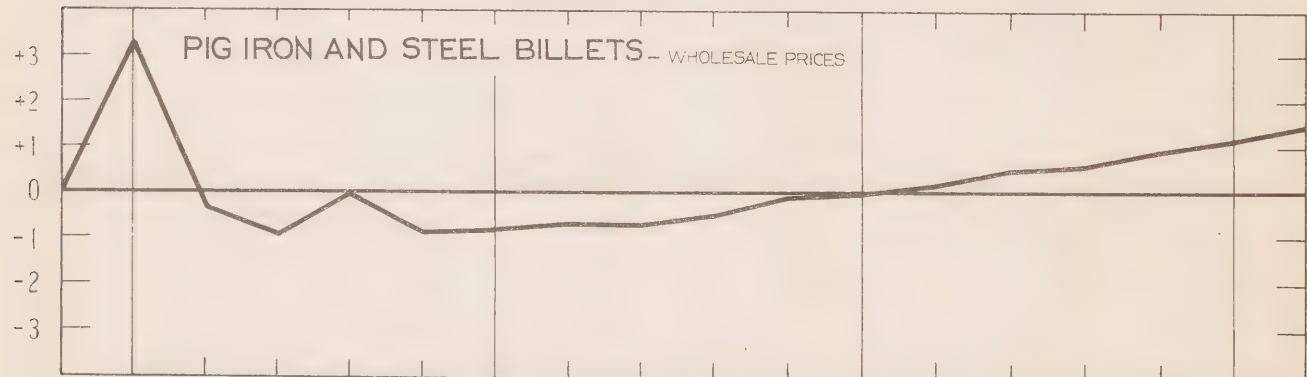
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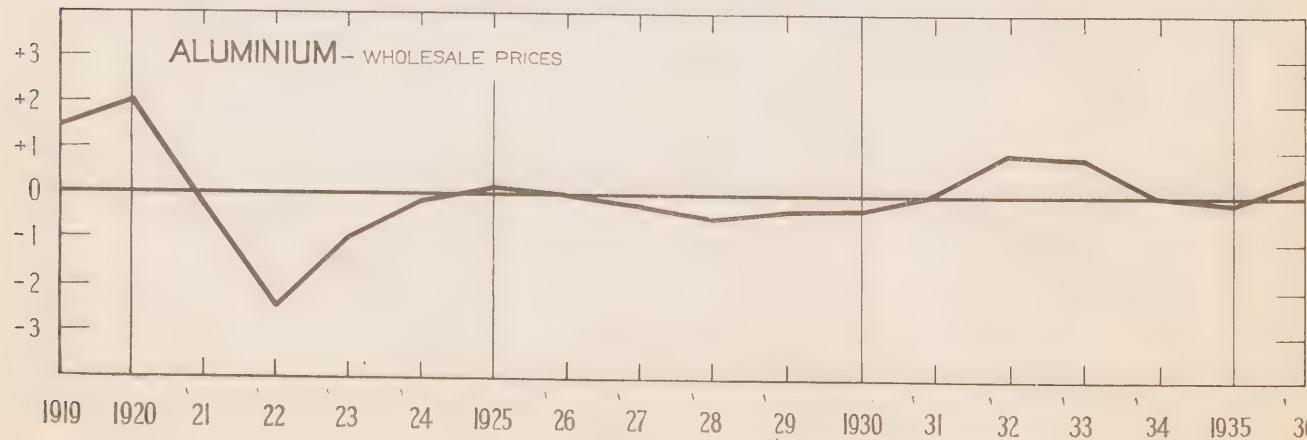
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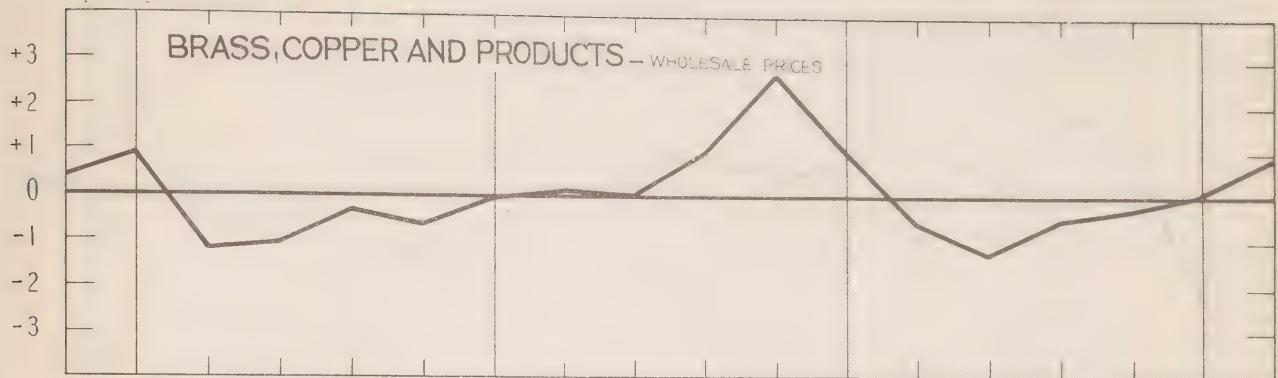


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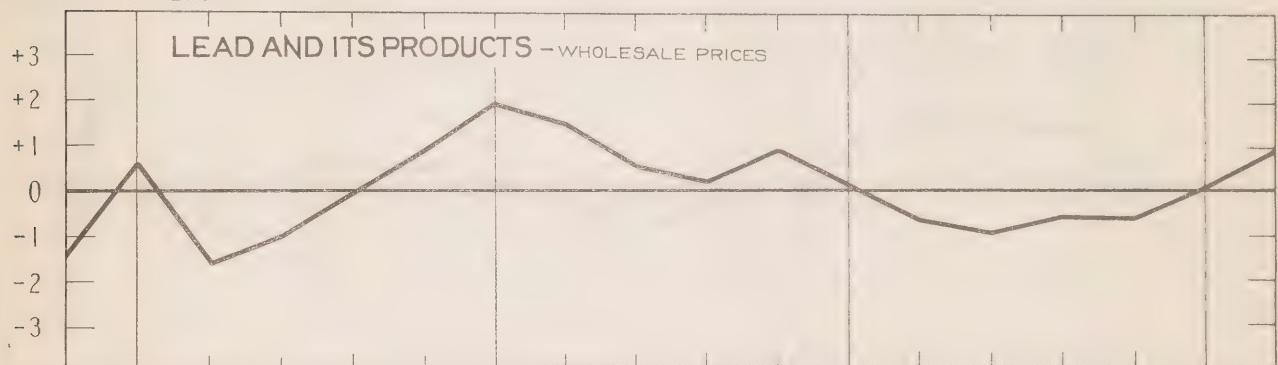


1919 1920 21 22 23 24 1925 26 27 28 29 1930 31 32 33 34 1935 36

Chart 237



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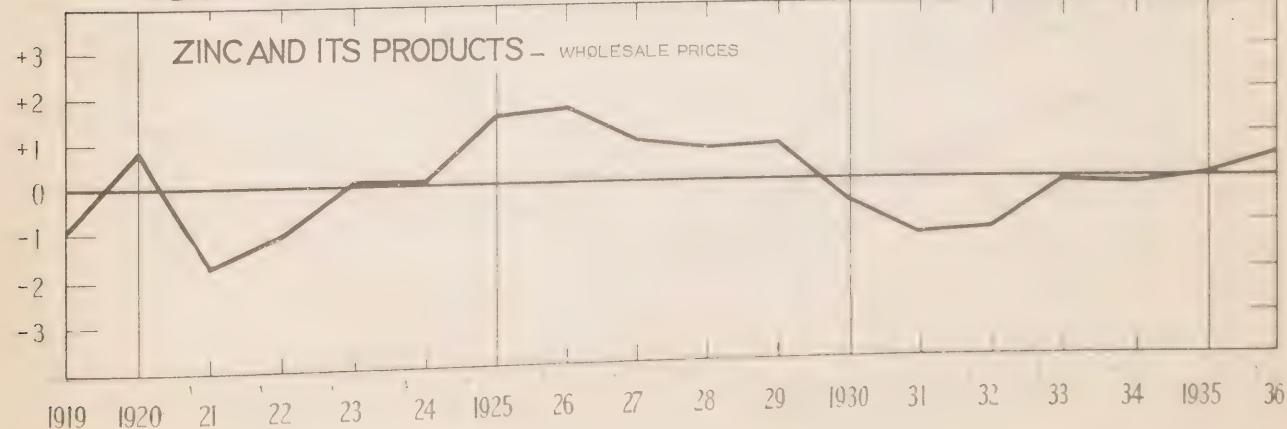
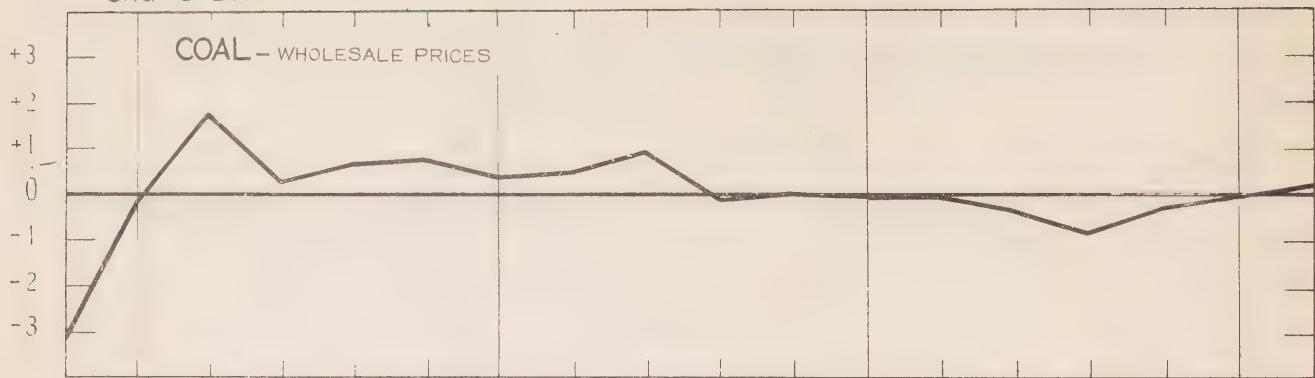
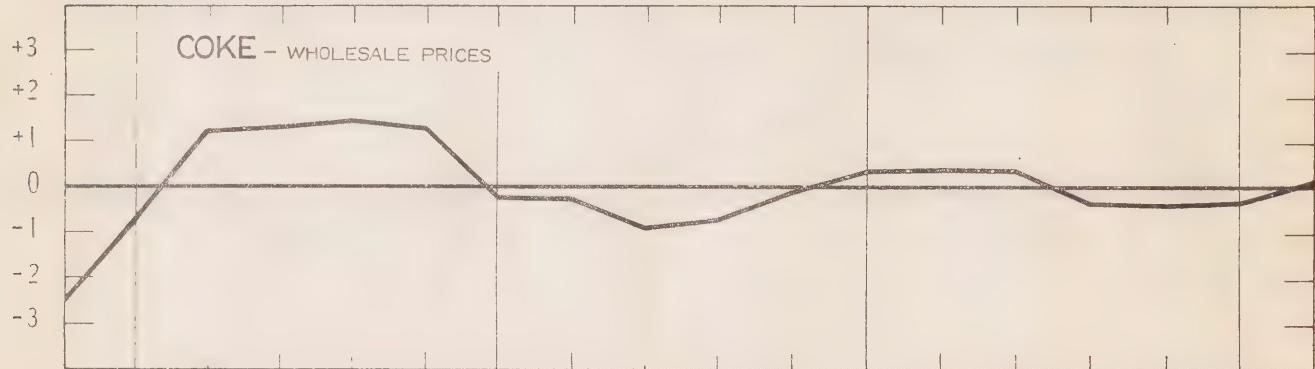


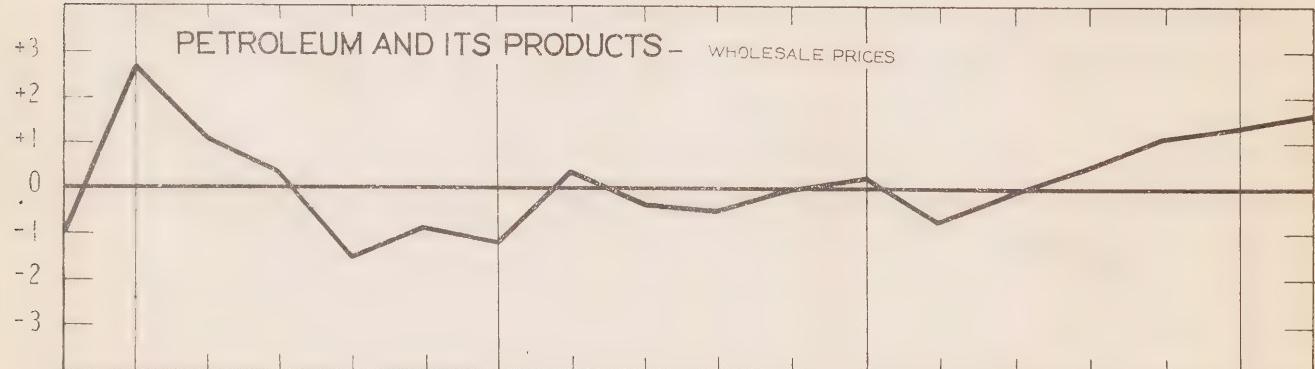
Chart 241



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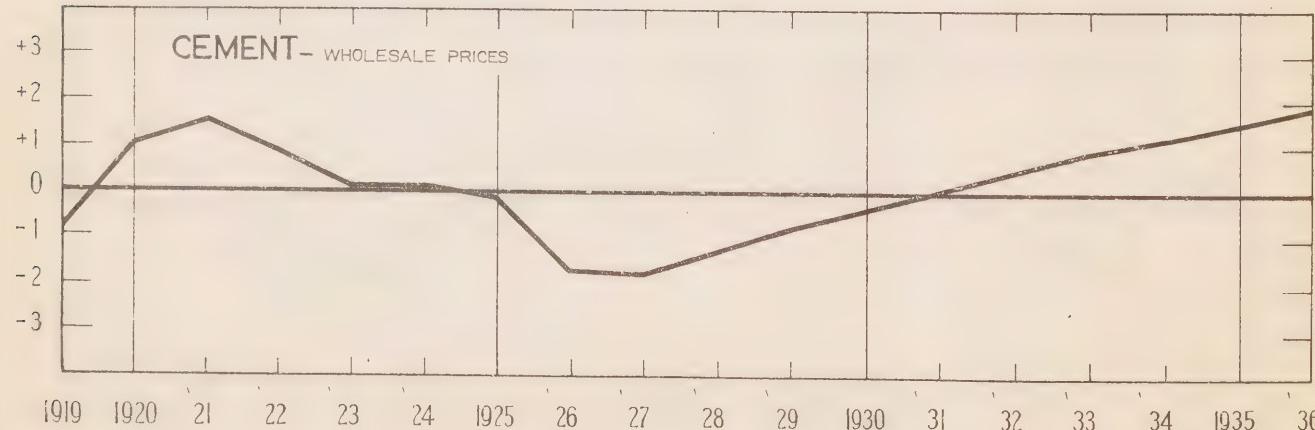
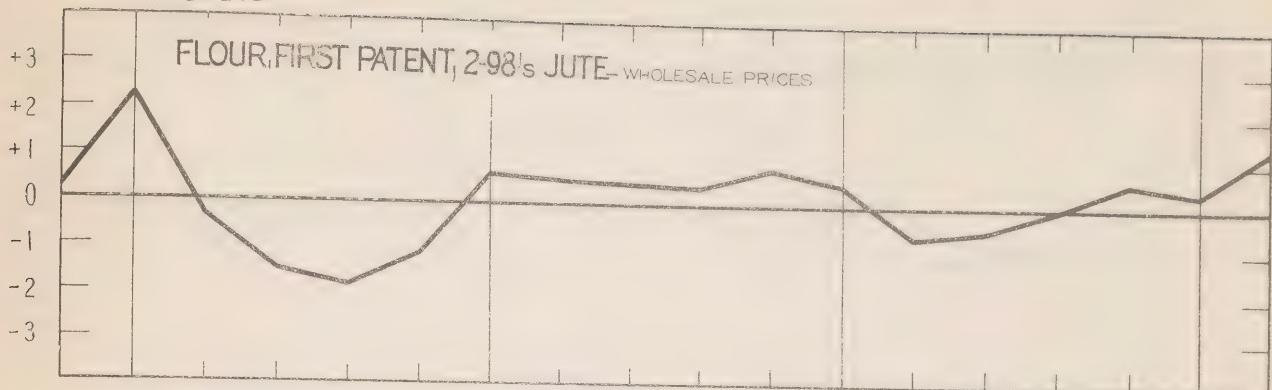
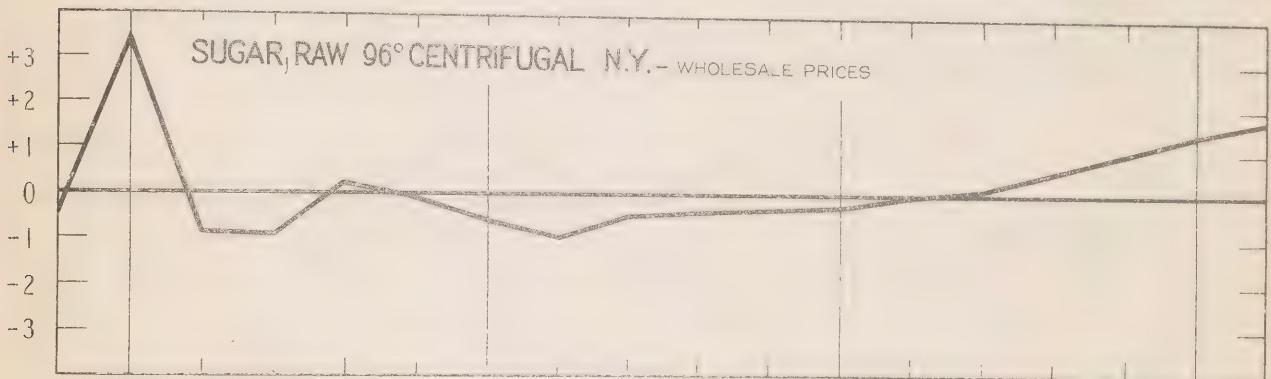


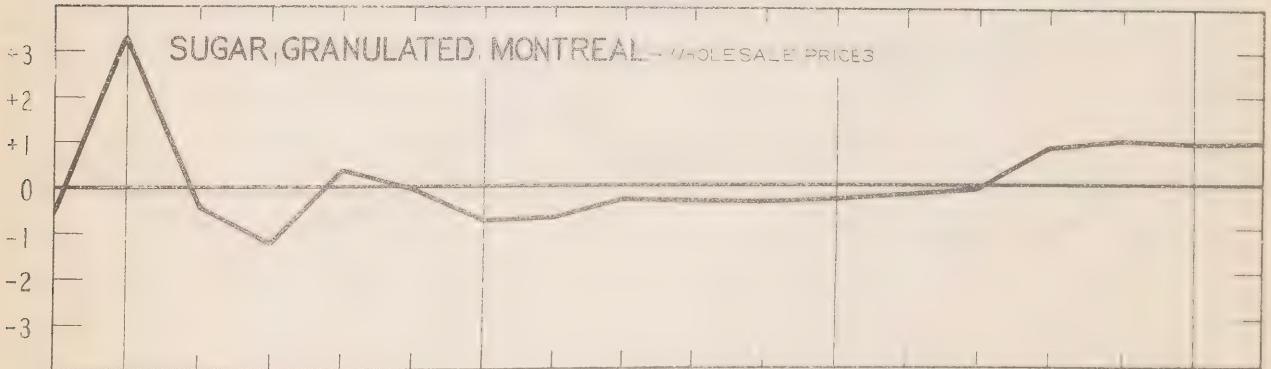
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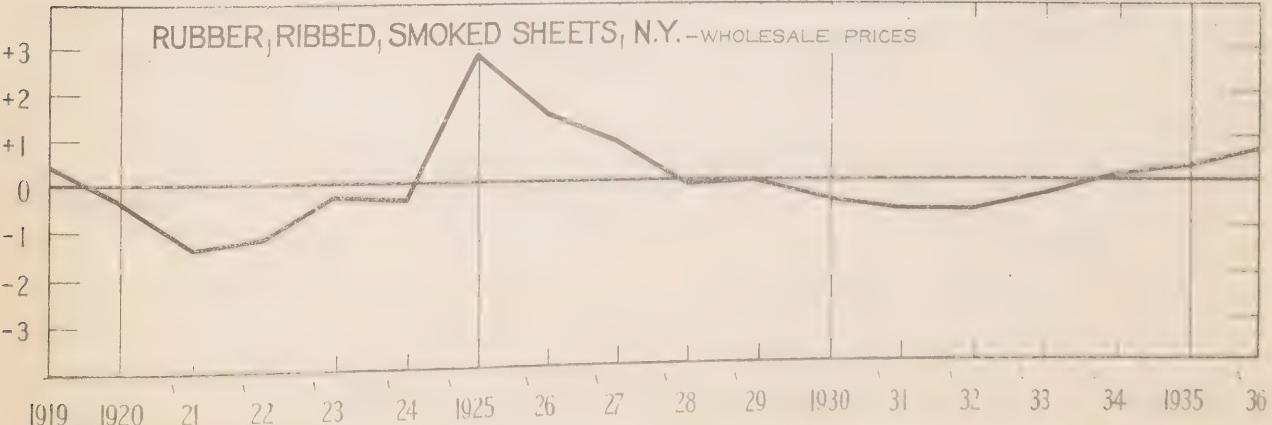
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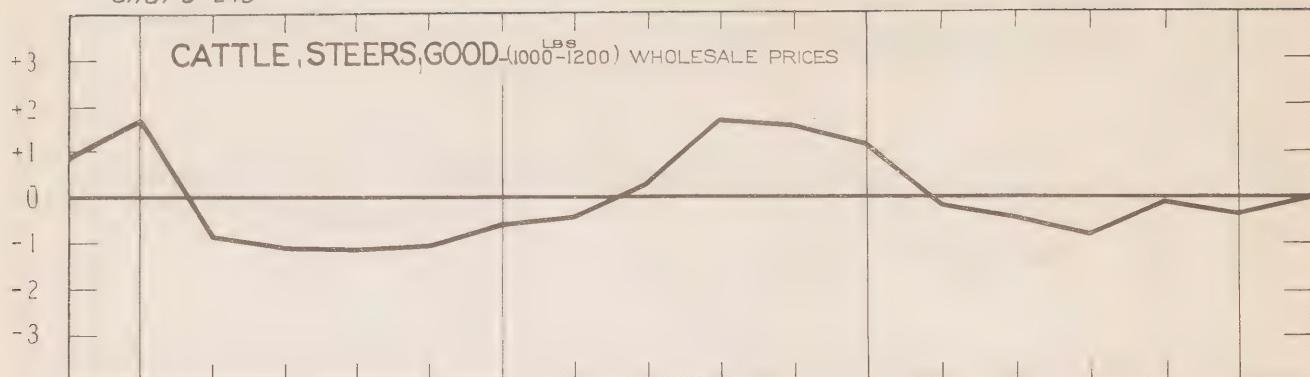


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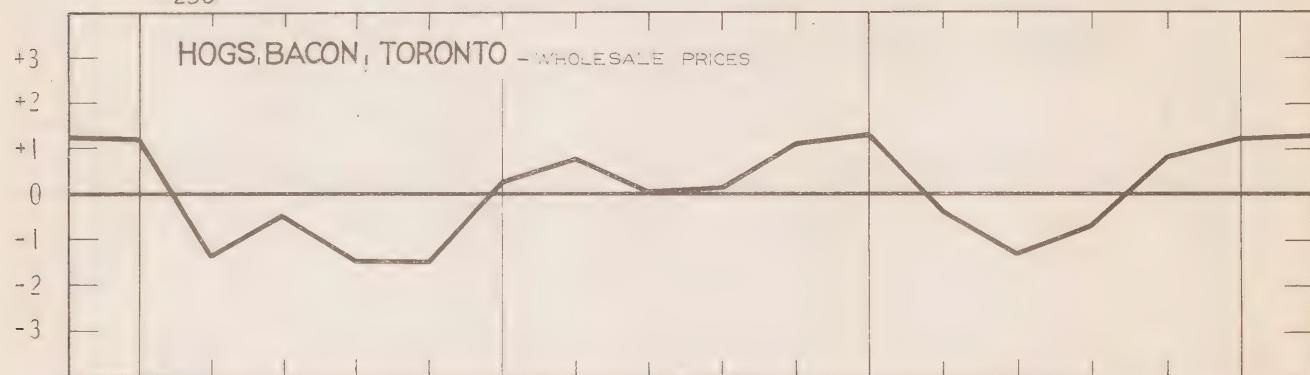


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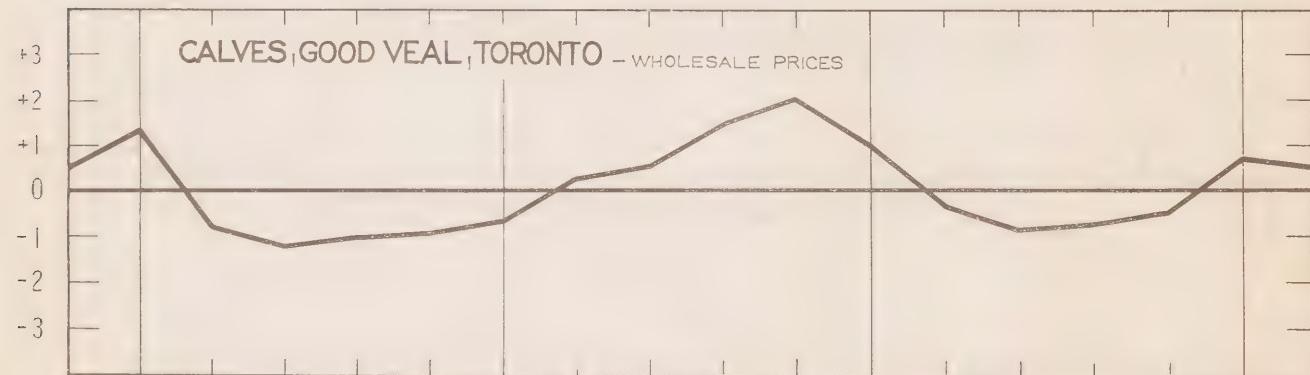
Chart 249



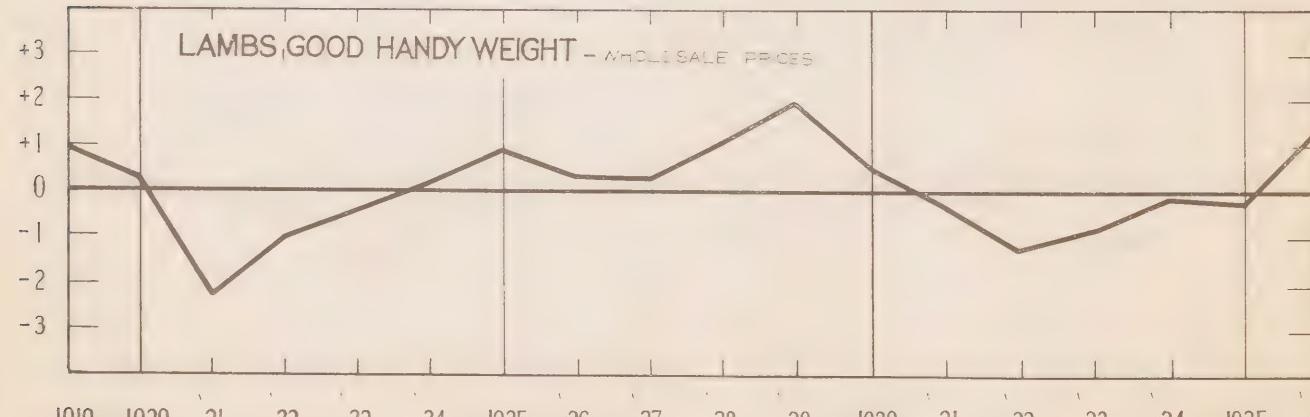
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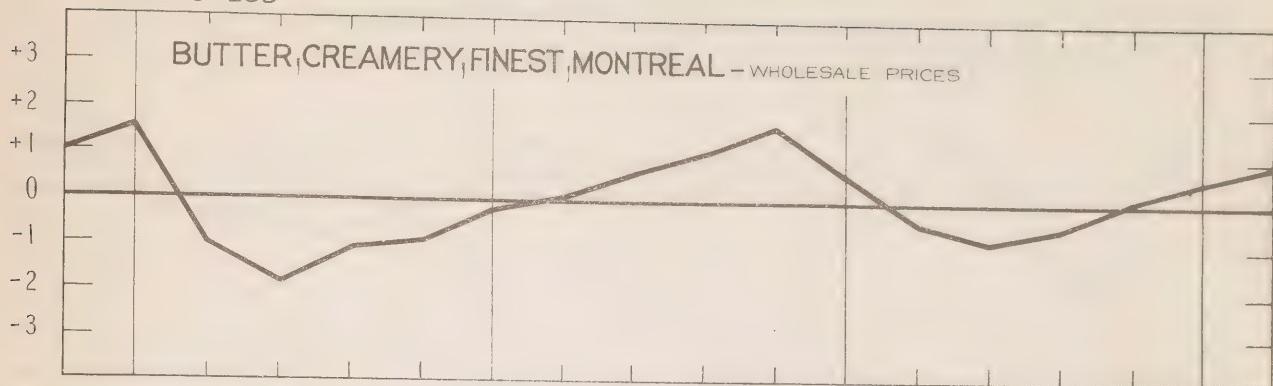
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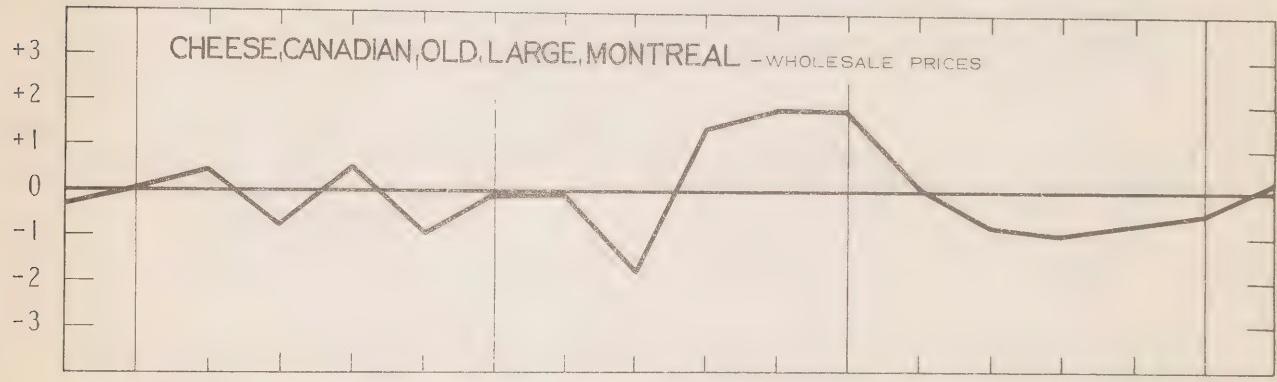
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Chart 253

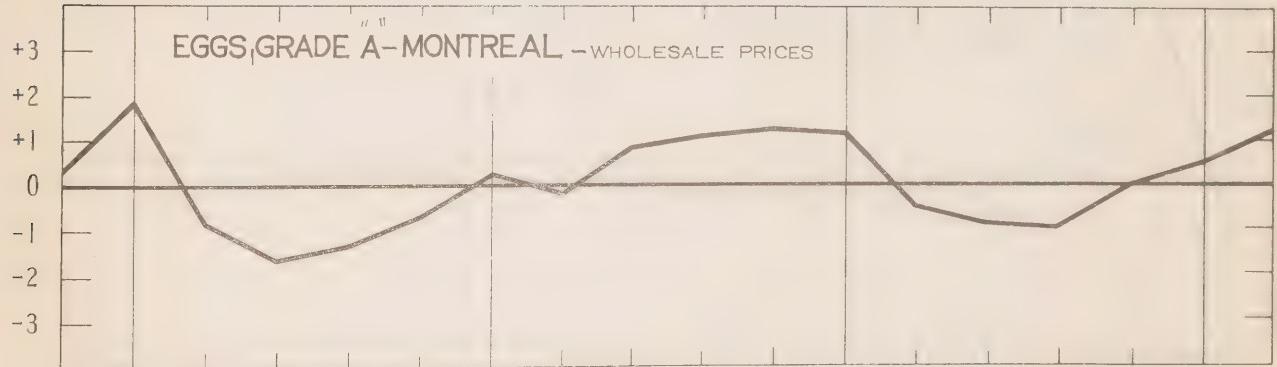
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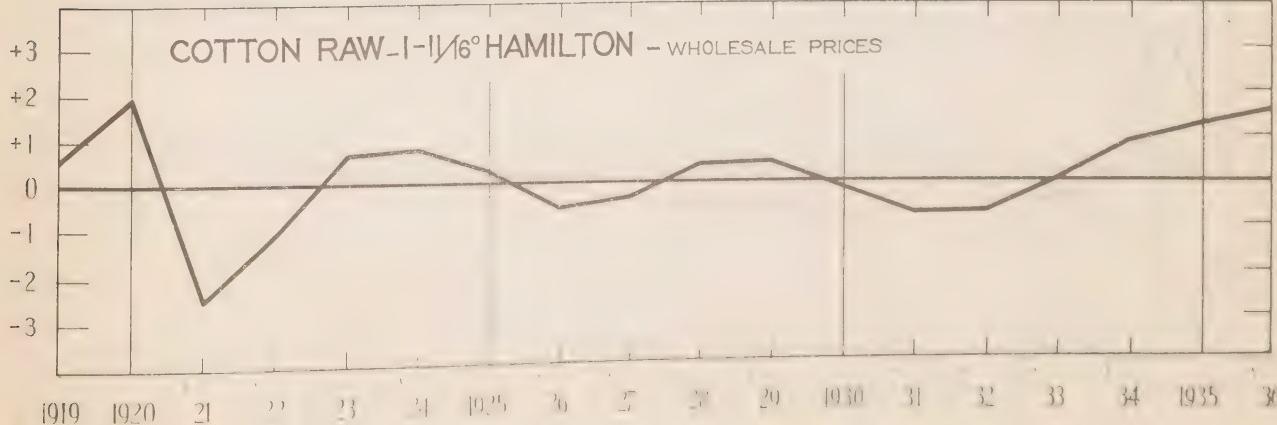
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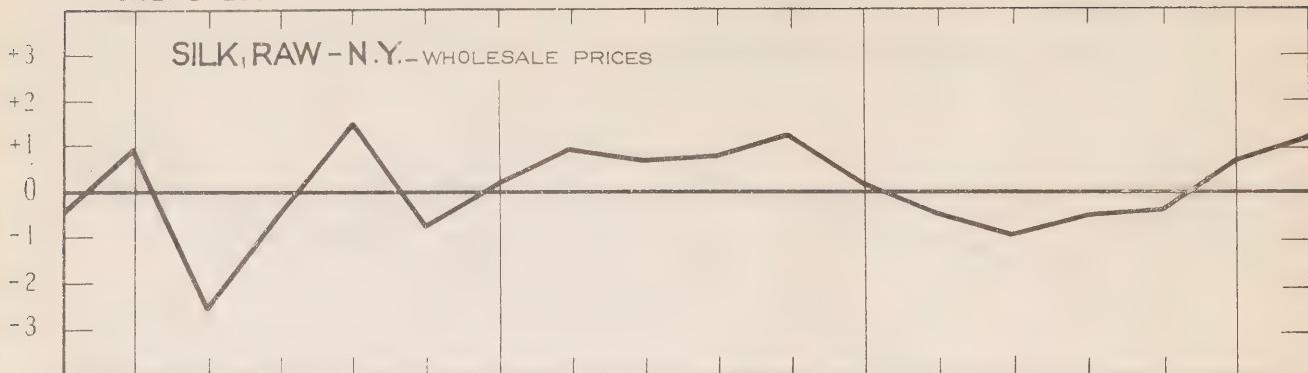


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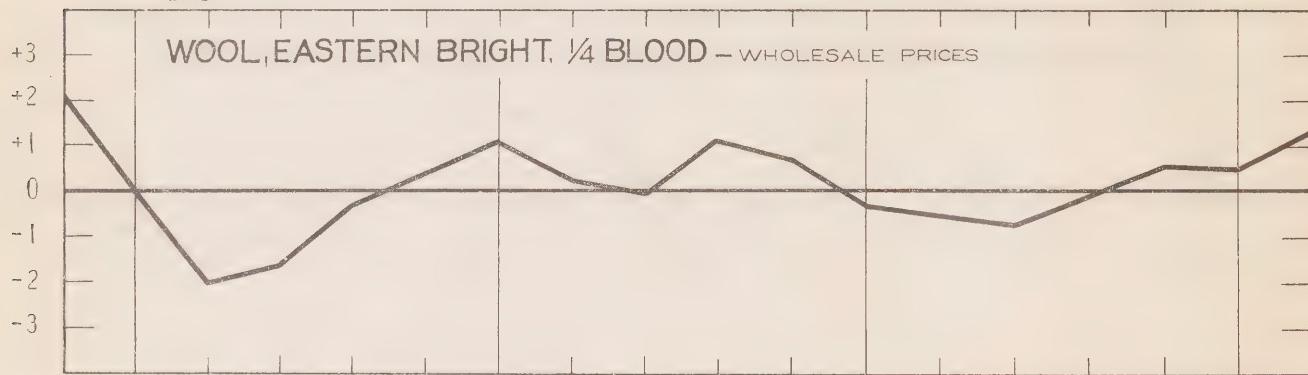


1919 1920 1921 1922 1923 1924 1925 1926 1927 1928 1929 1930 1931 1932 1933 1934 1935 1936

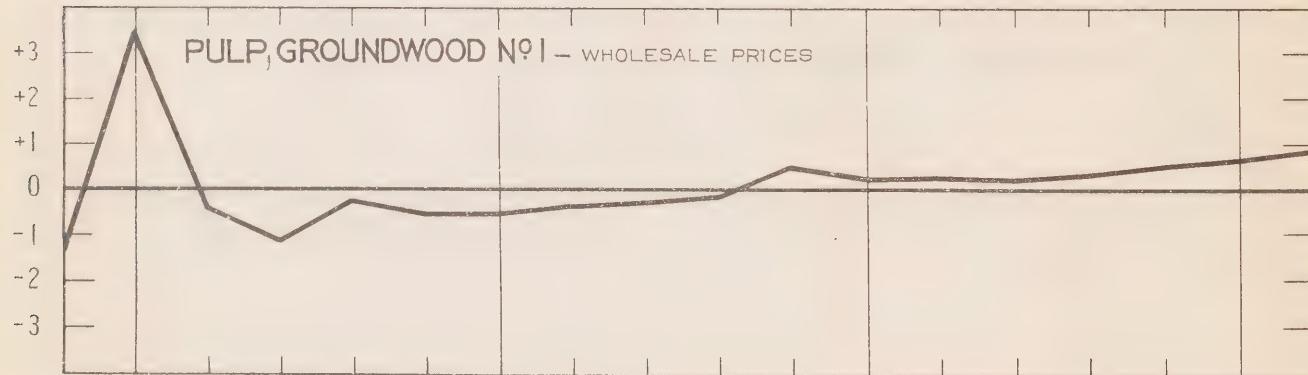
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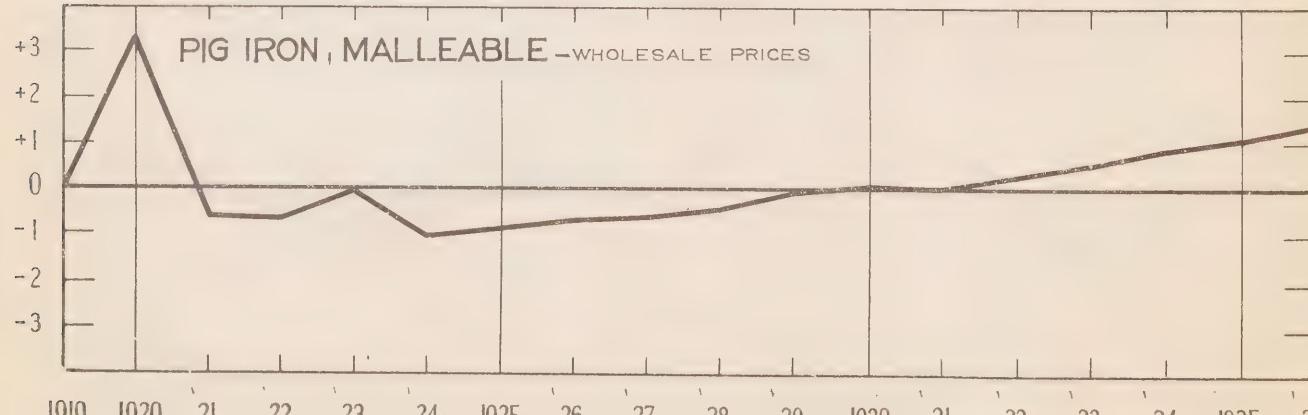
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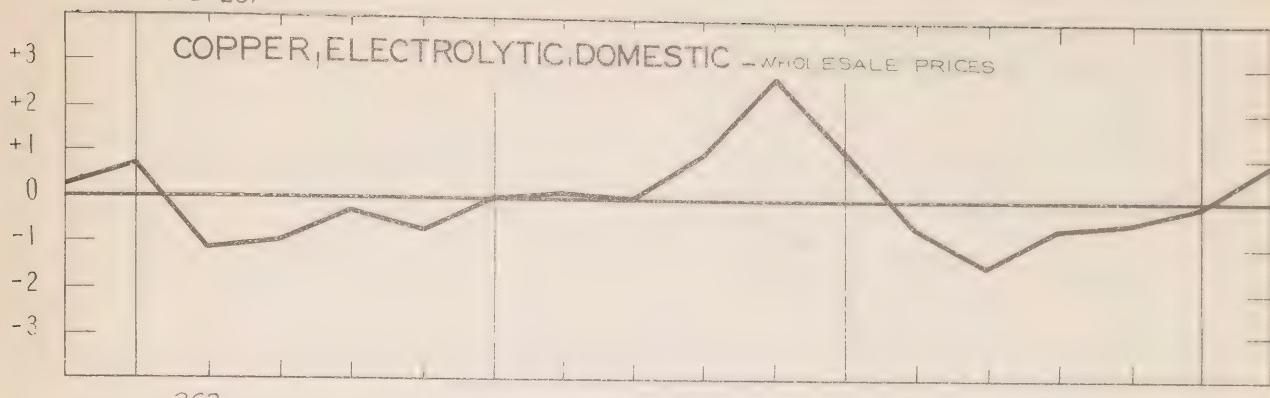


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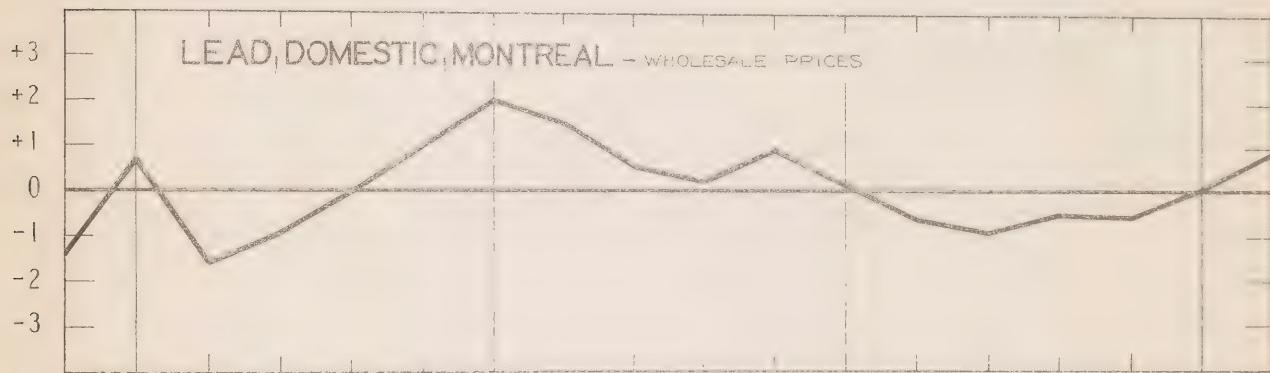


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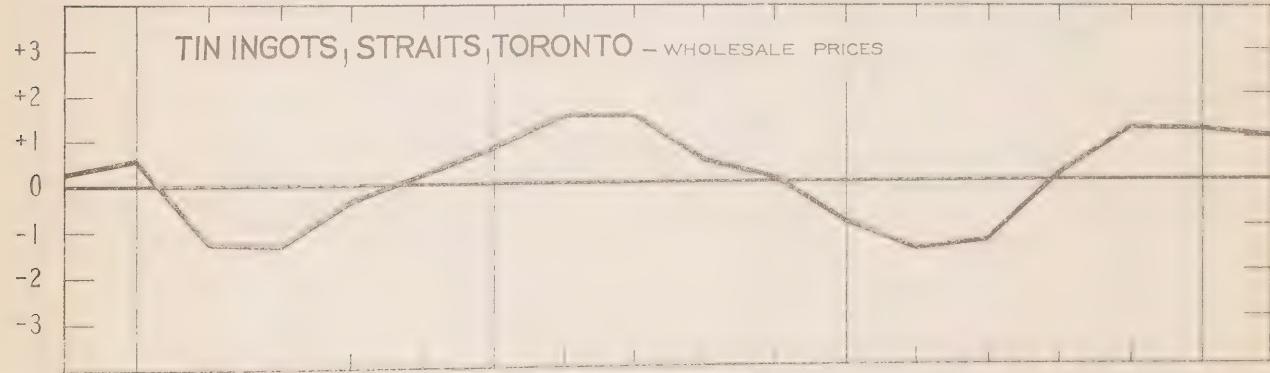
Chart 261



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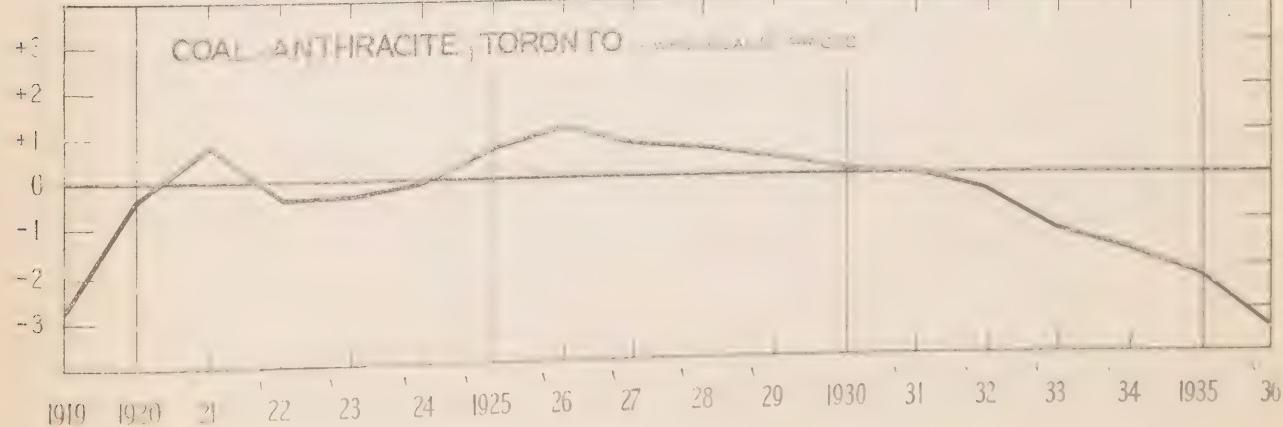
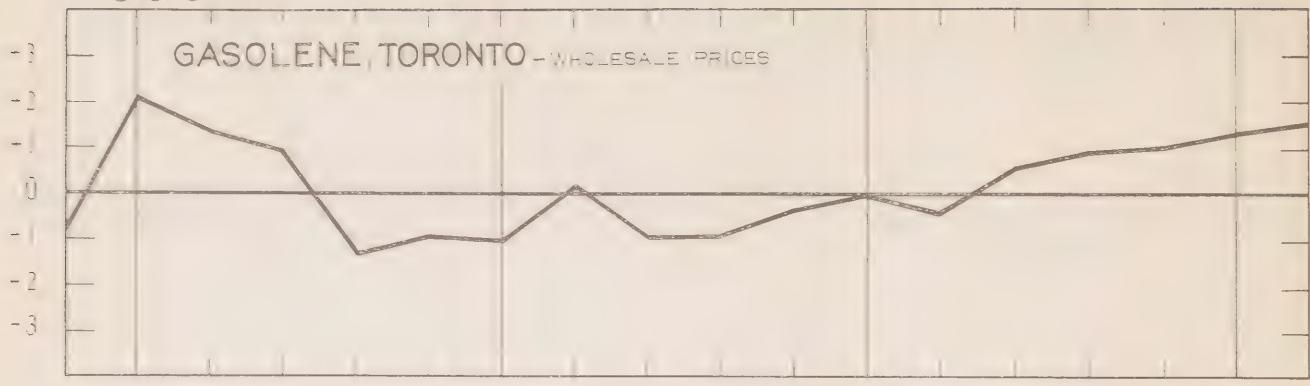
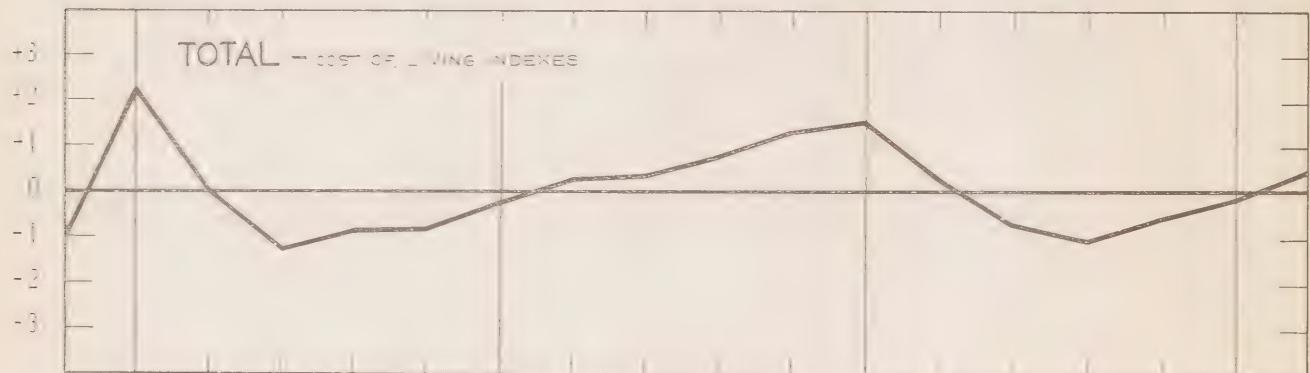


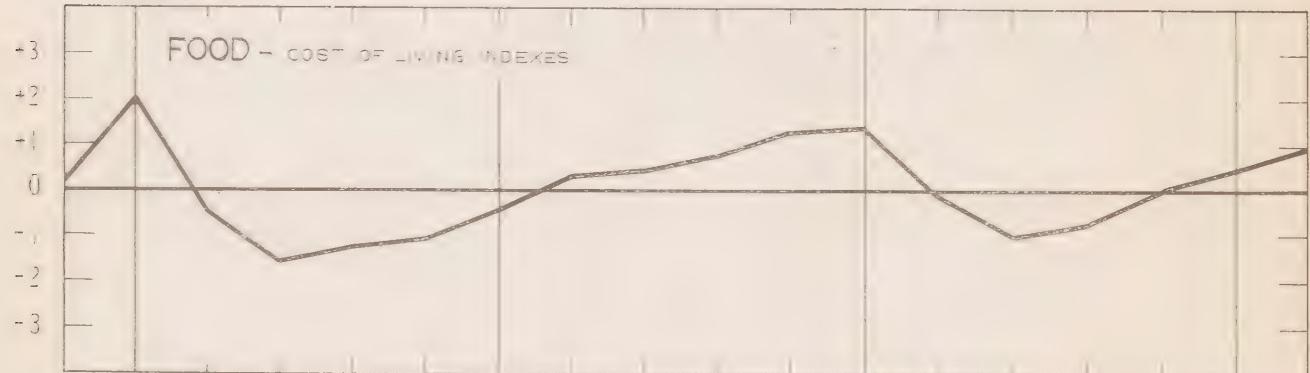
Chart 265



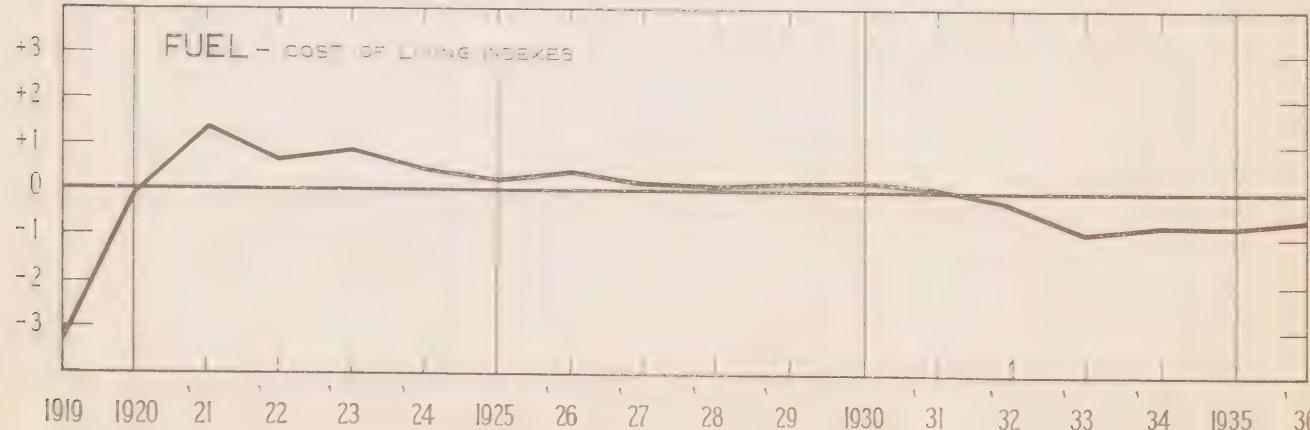
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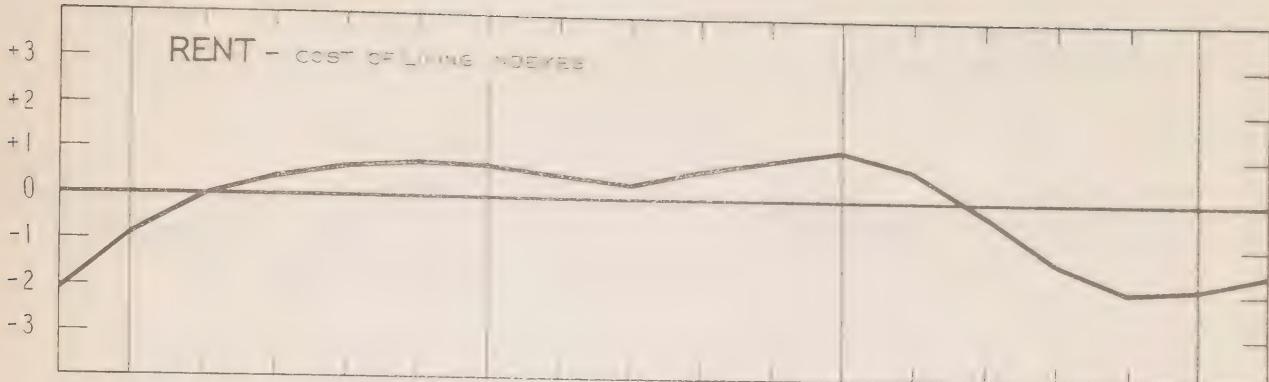
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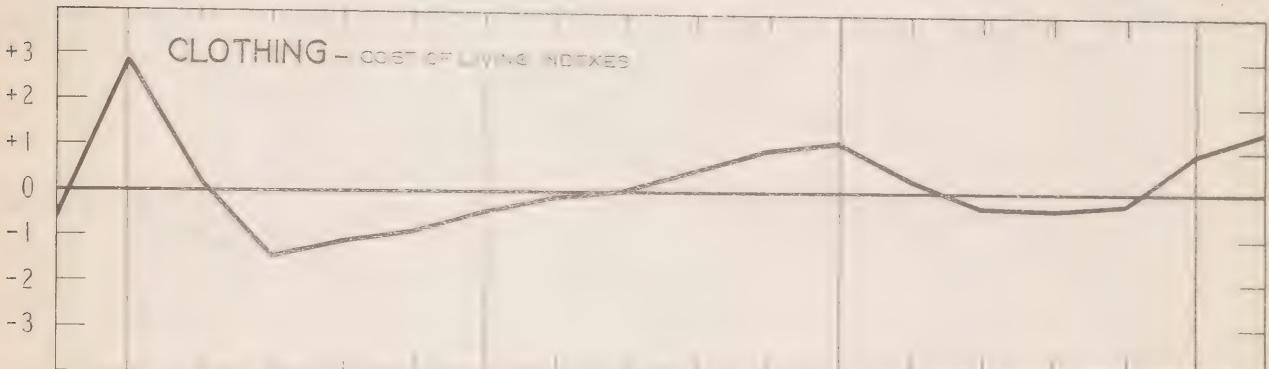
1919 1920 21 22 23 24 1925 26 27 28 29 1930 31 32 33 34 1935 36

Chart 269

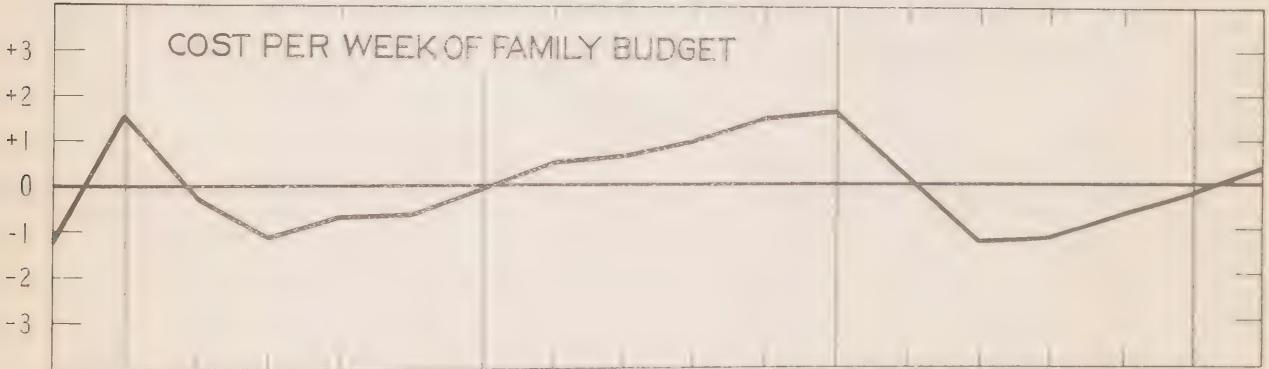
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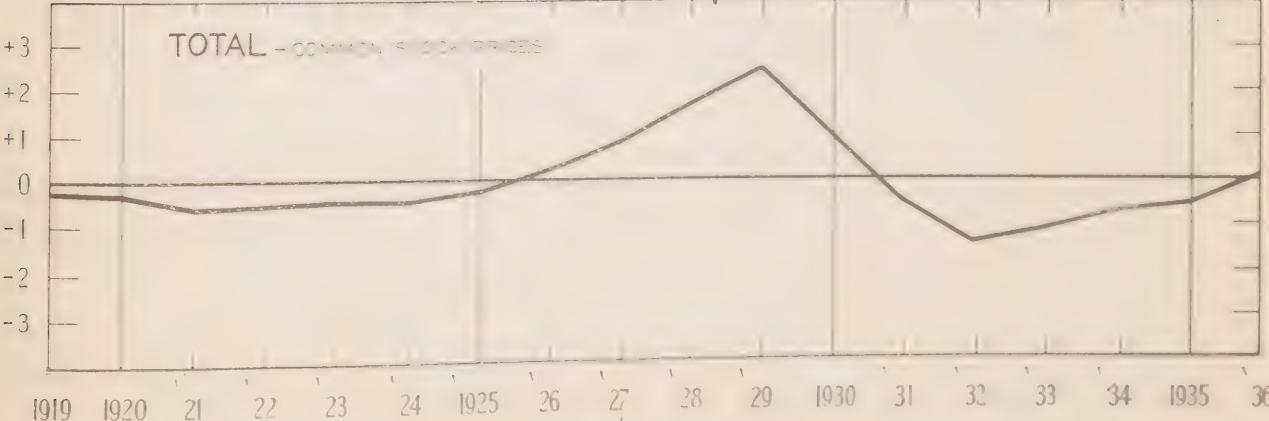
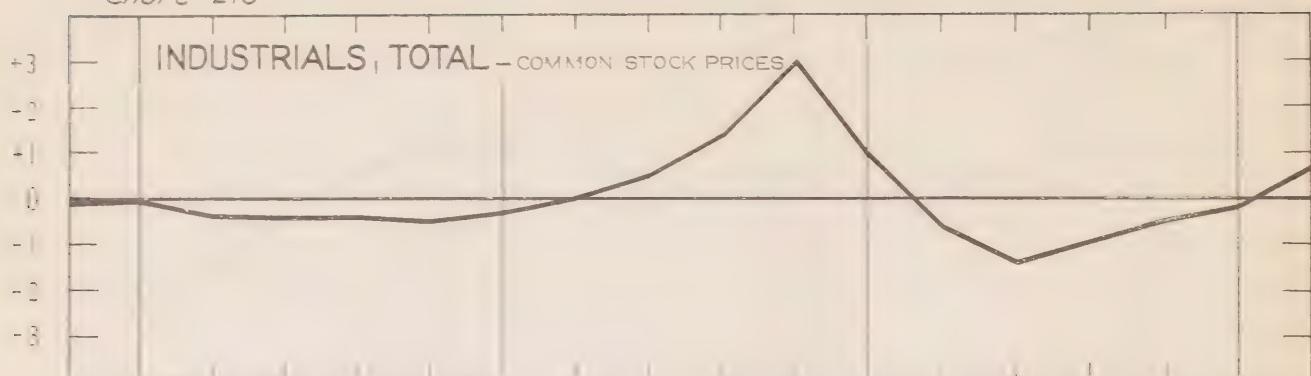
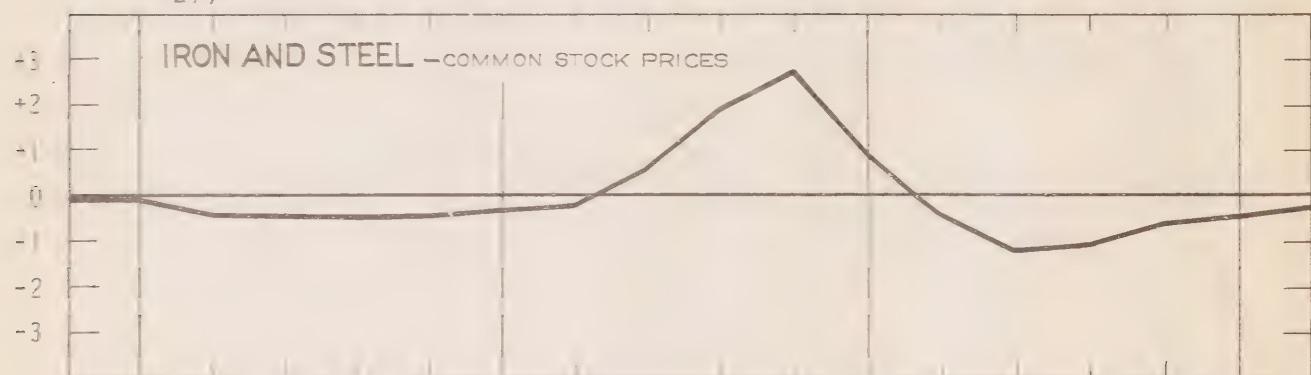


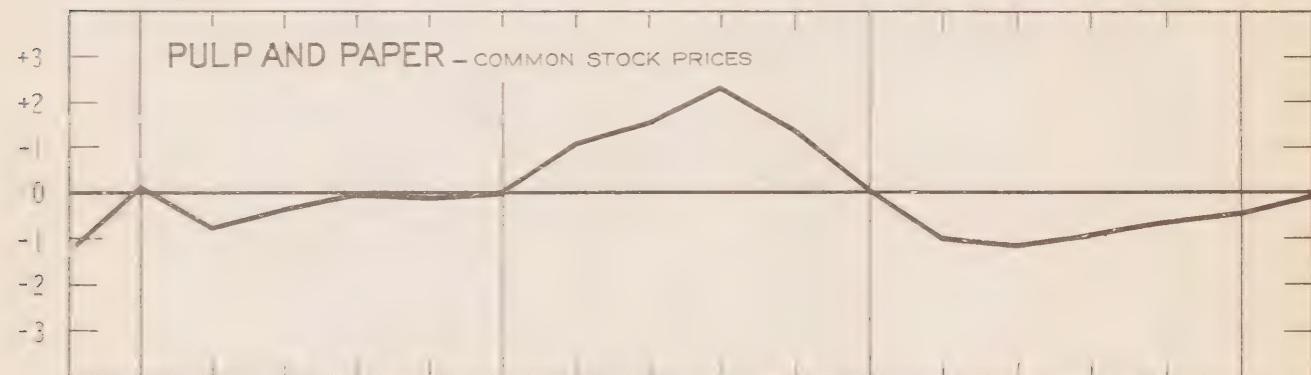
Chart 273



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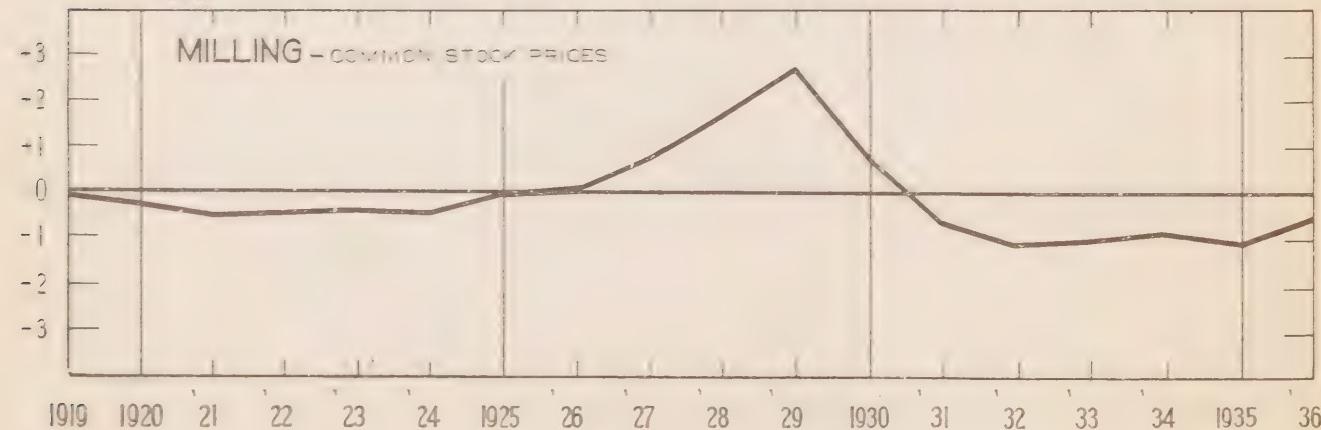
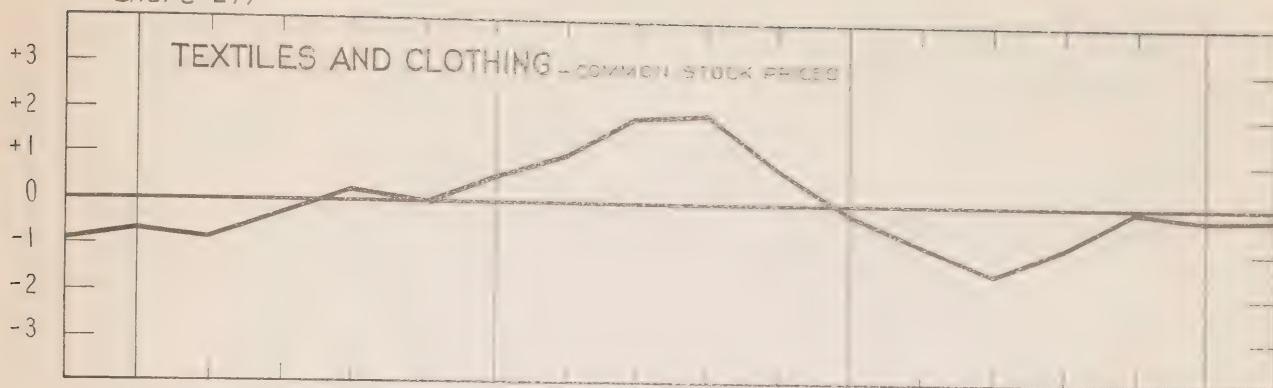
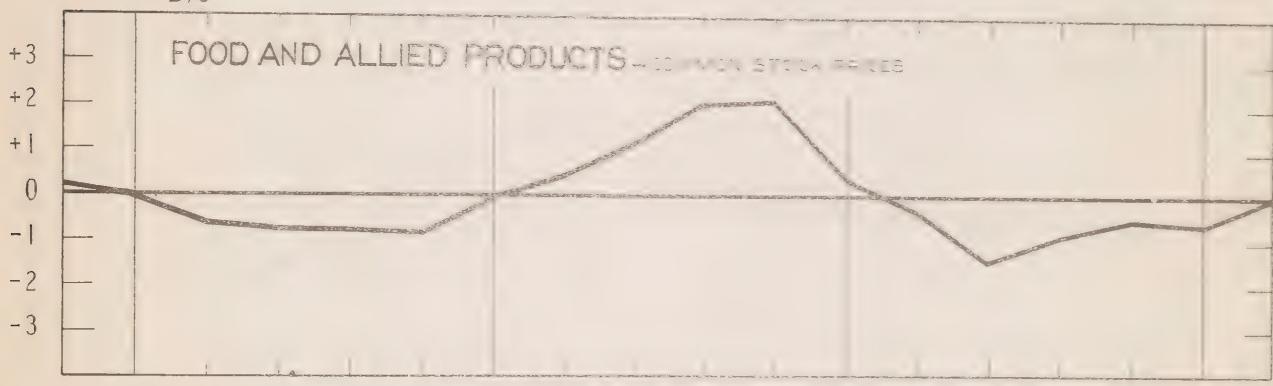


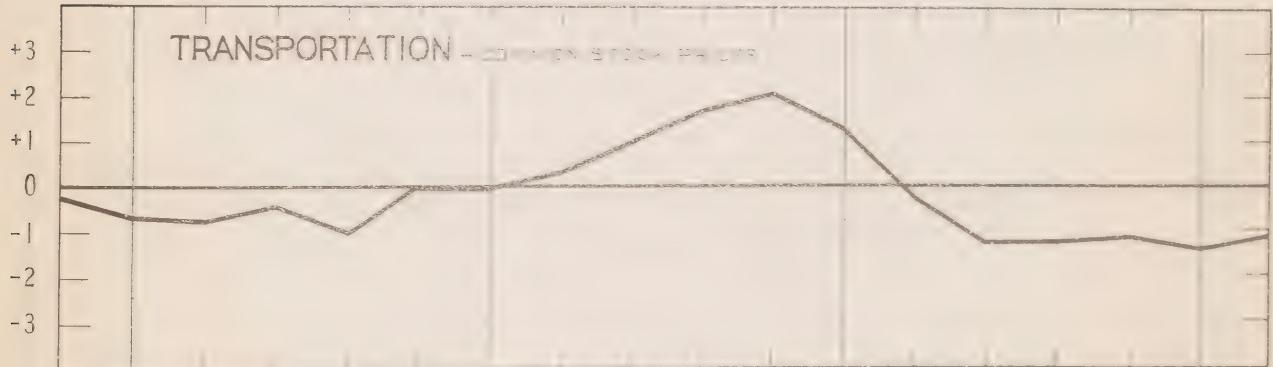
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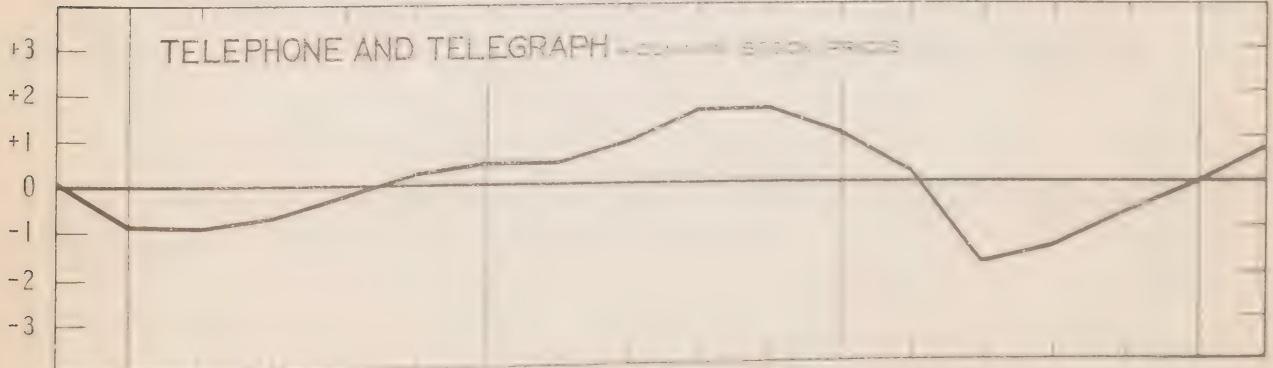
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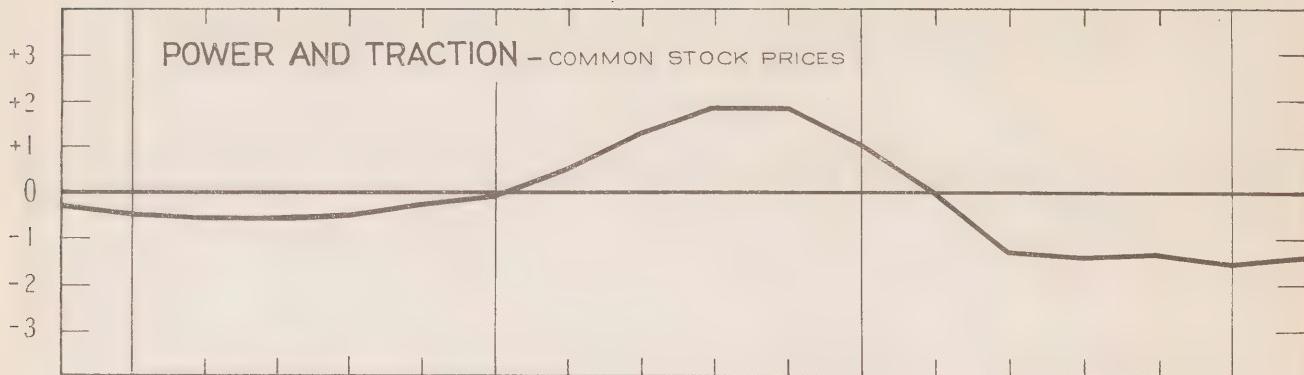


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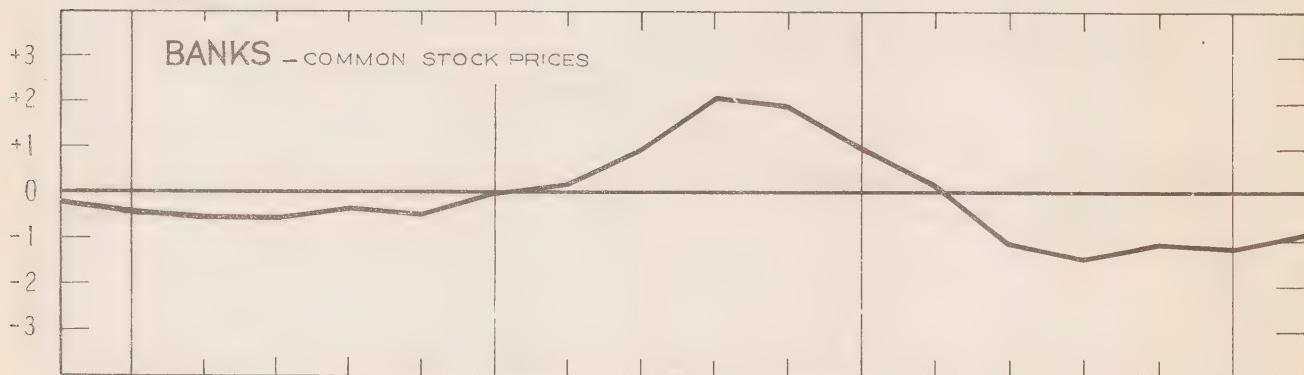


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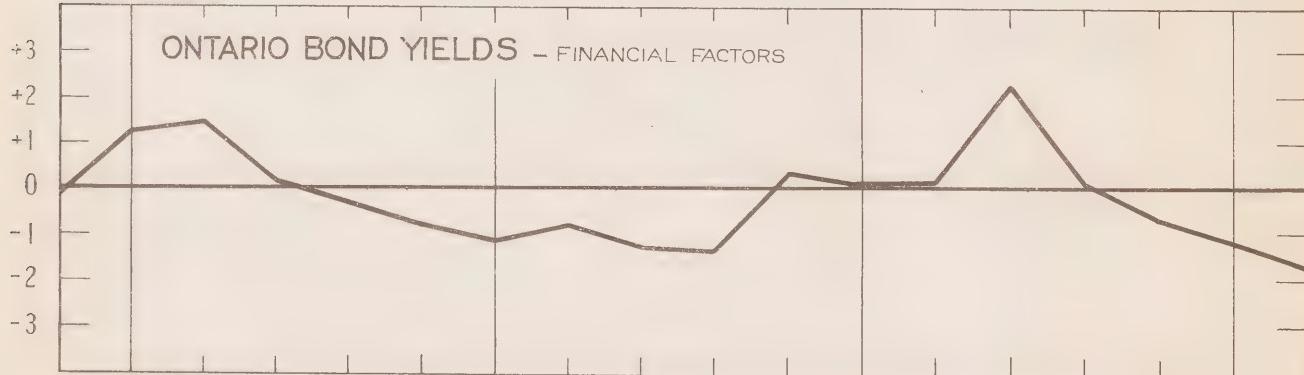
Chart 281



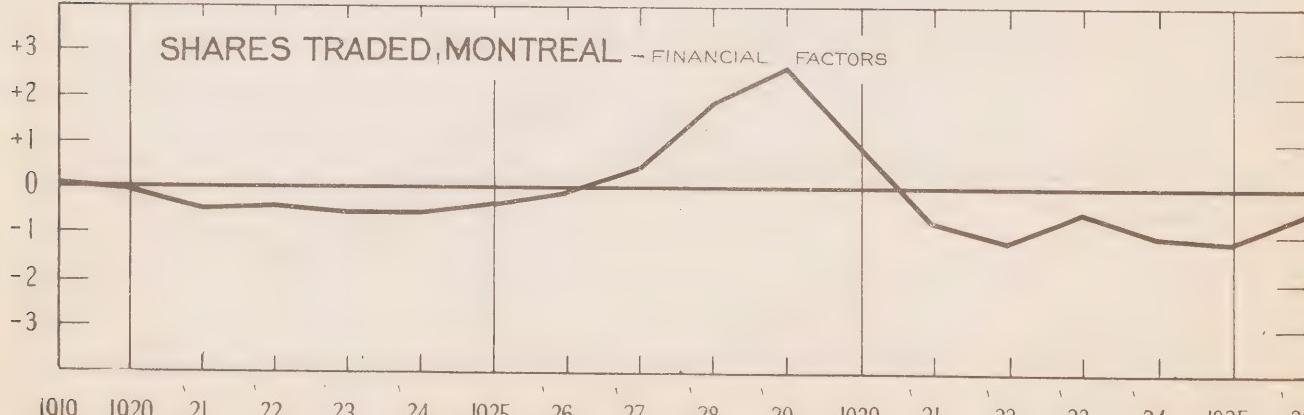
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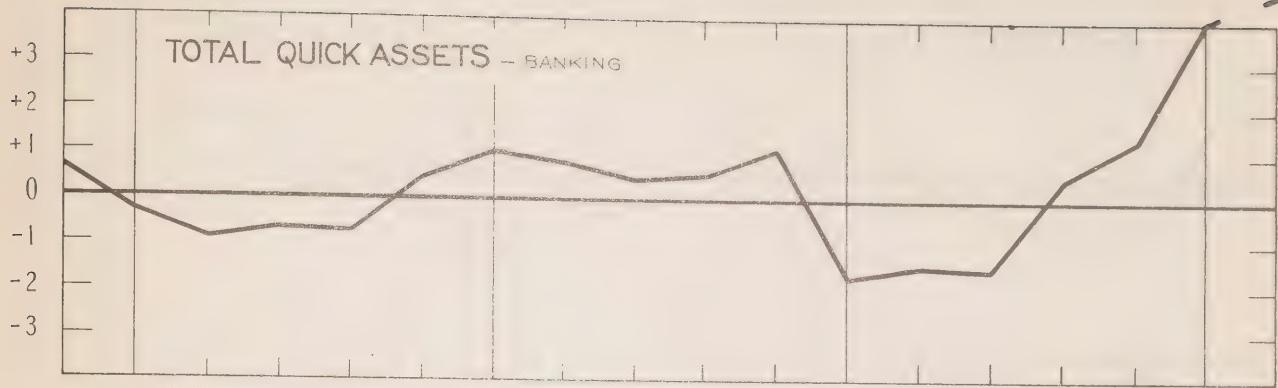


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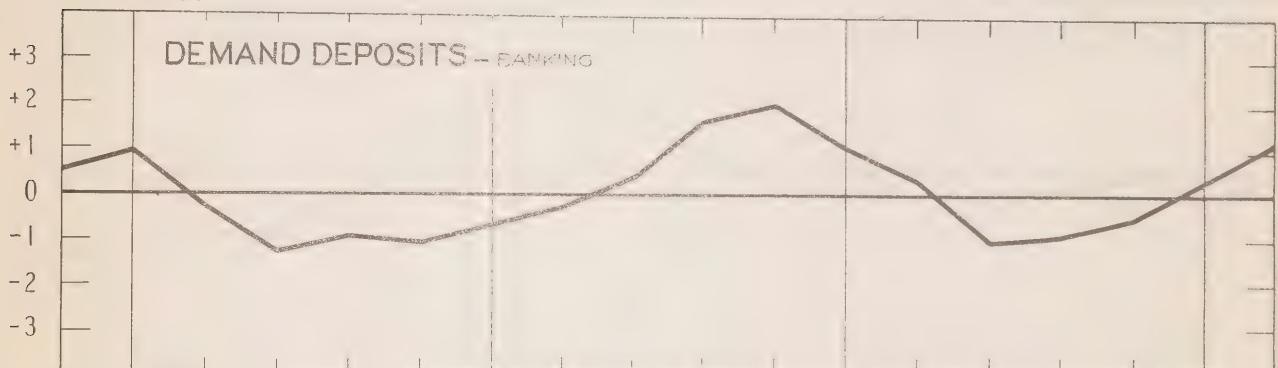


1919 1920 1921 1922 1923 1924 1925 1926 1927 1928 1929 1930 1931 1932 1933 1934 1935 1936

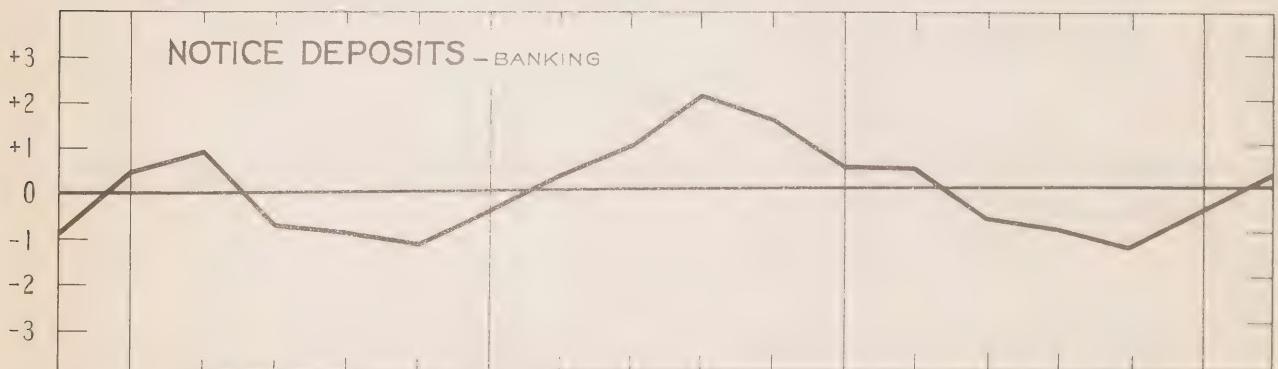
Chart 285



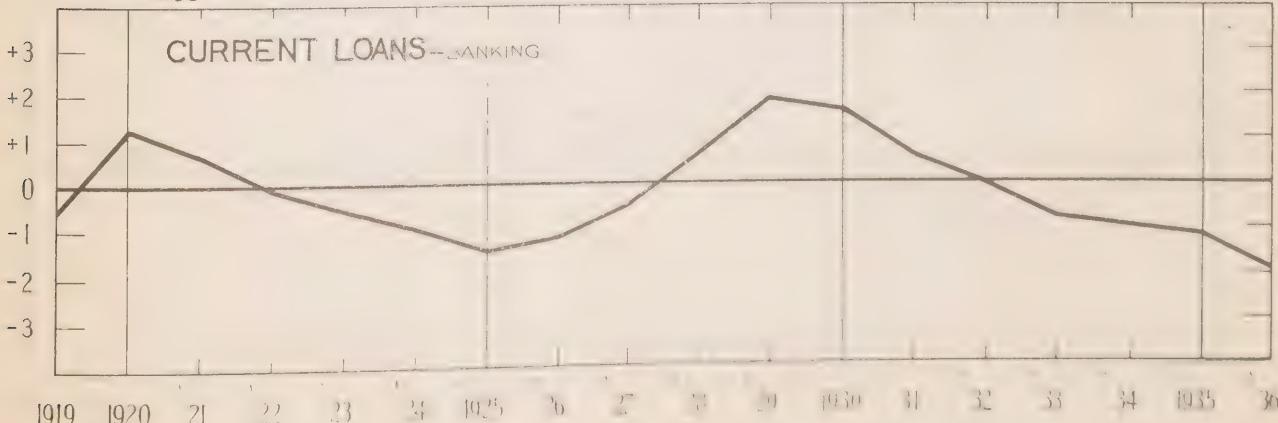
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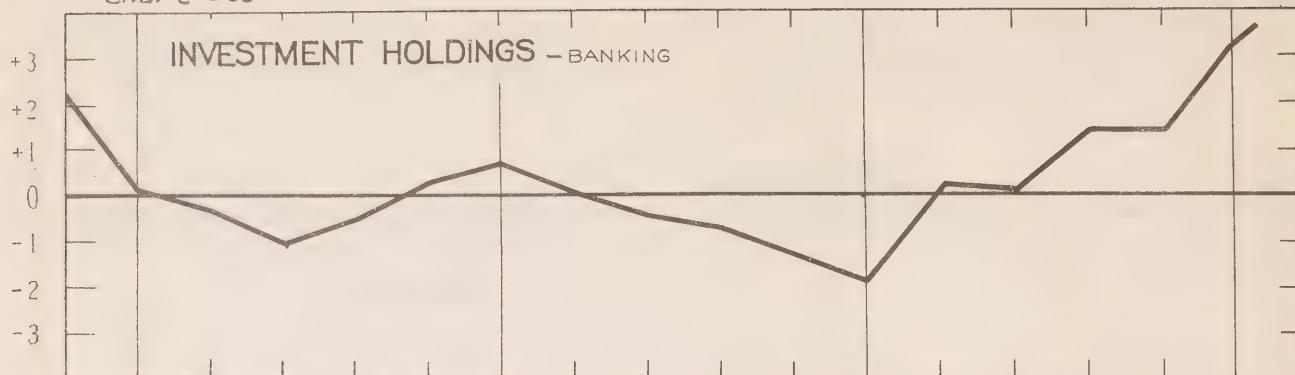


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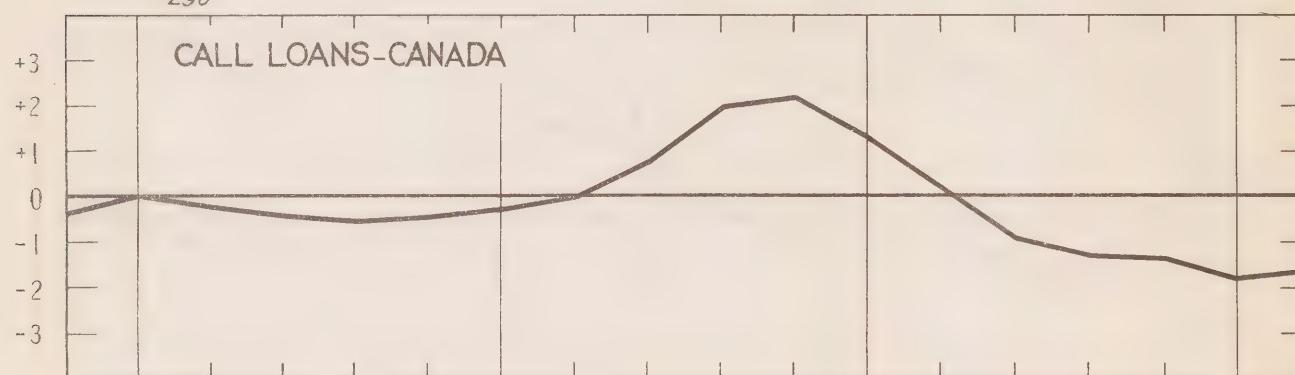


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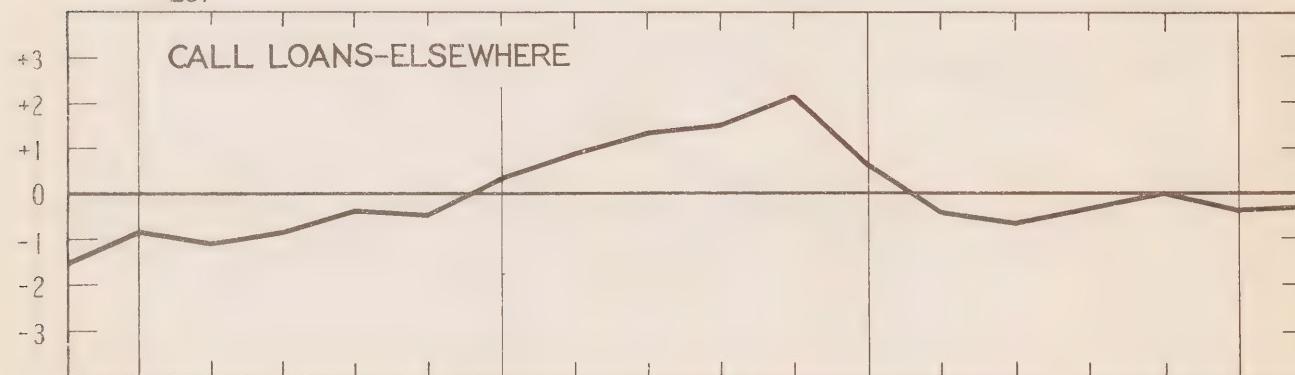
Chart 289



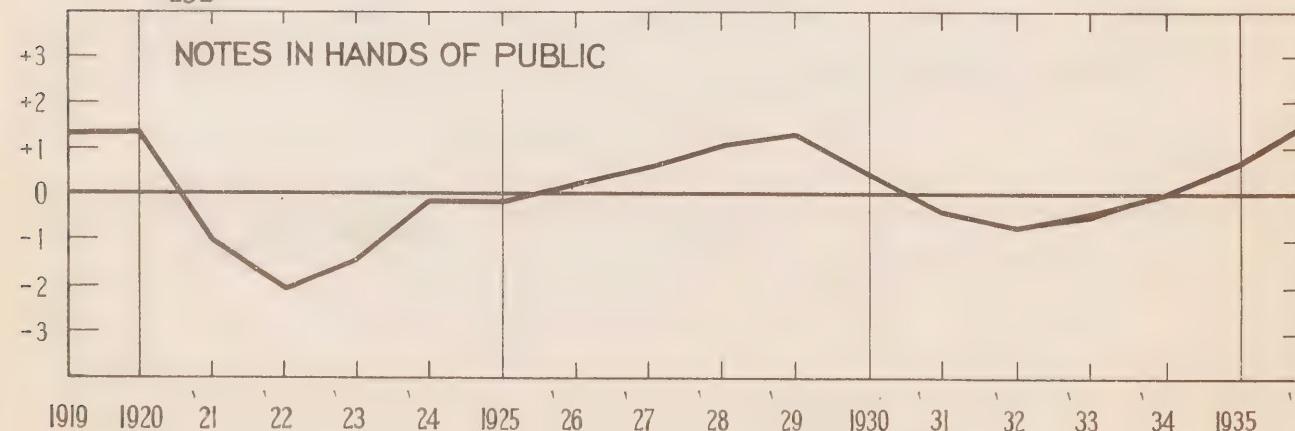
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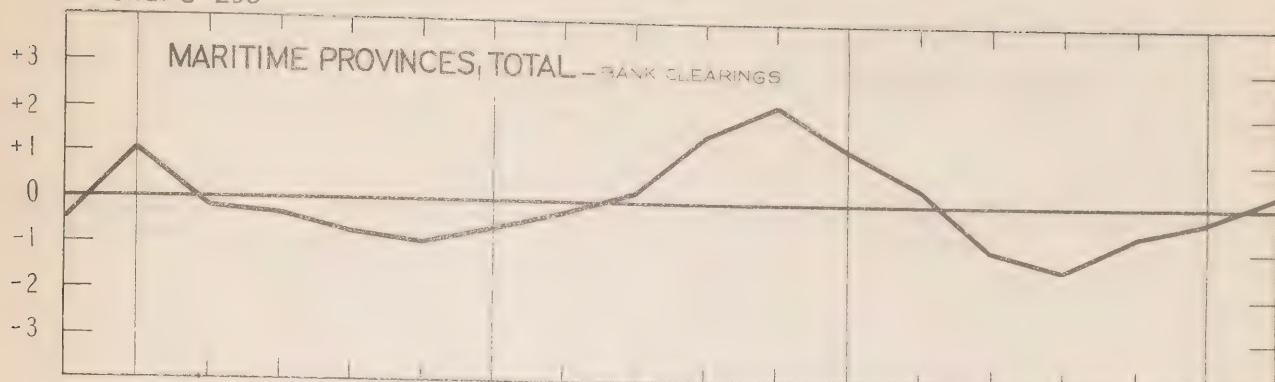
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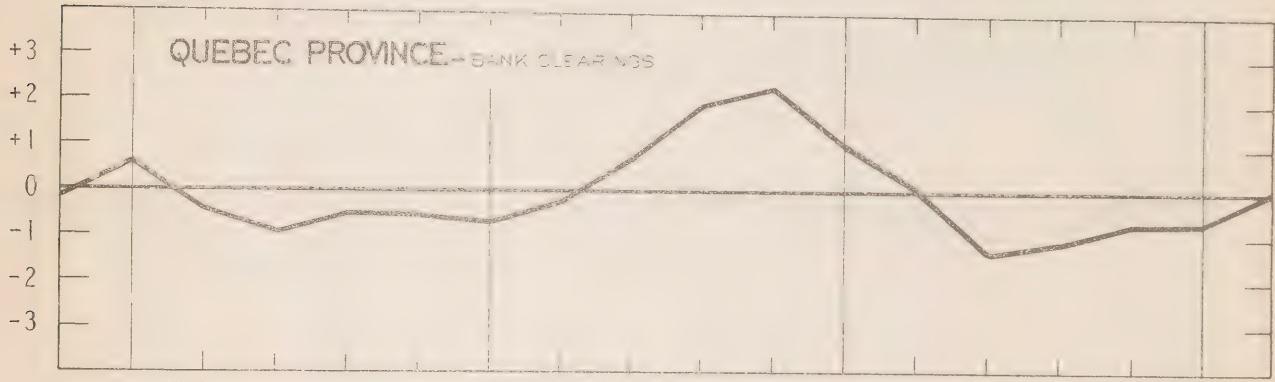
1919 1920 21 22 23 24 1925 26 27 28 29 1930 31 32 33 34 1935 36

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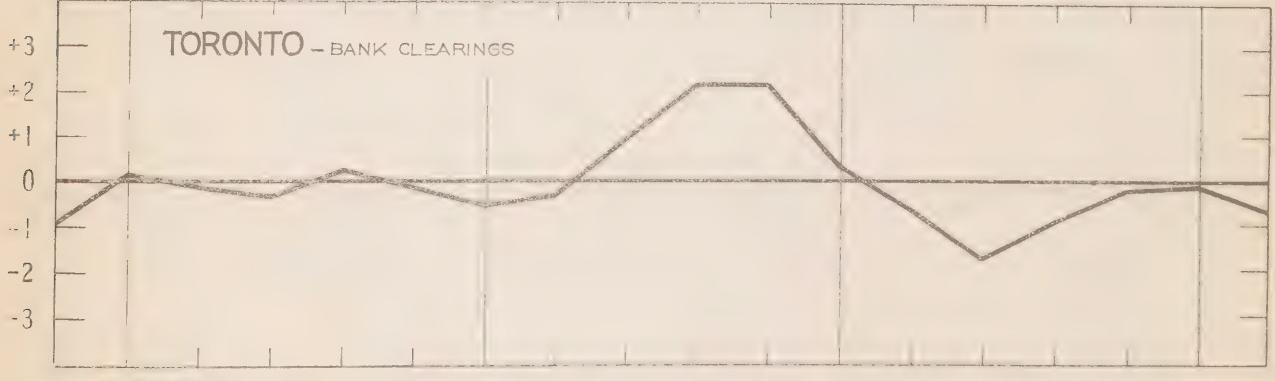
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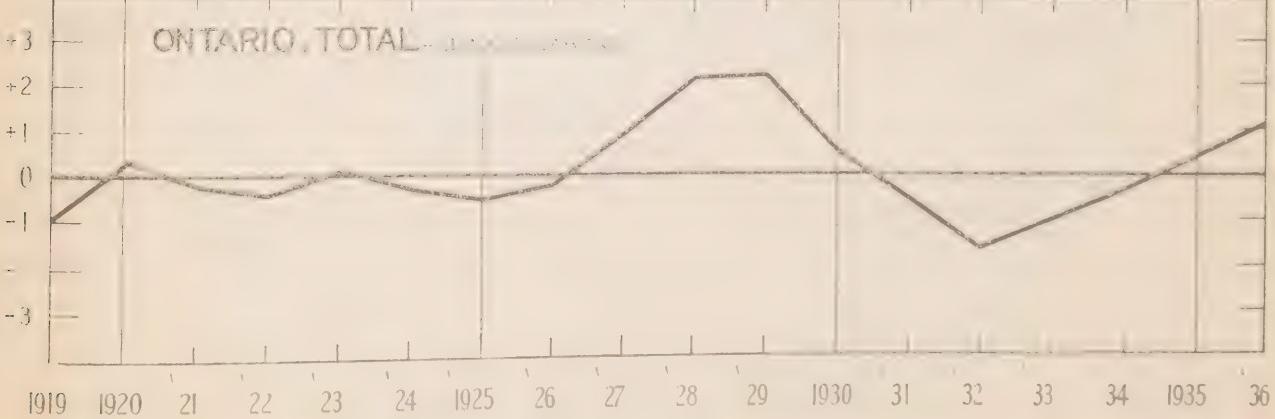
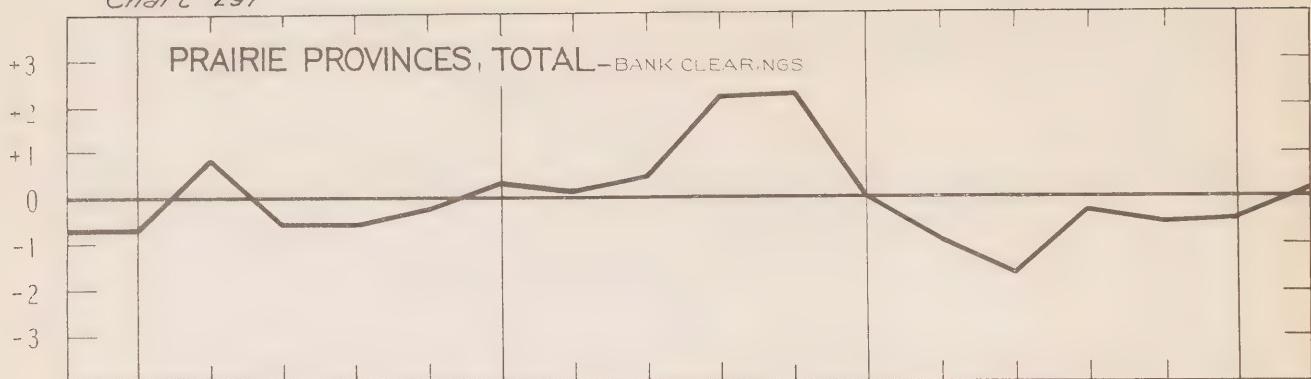
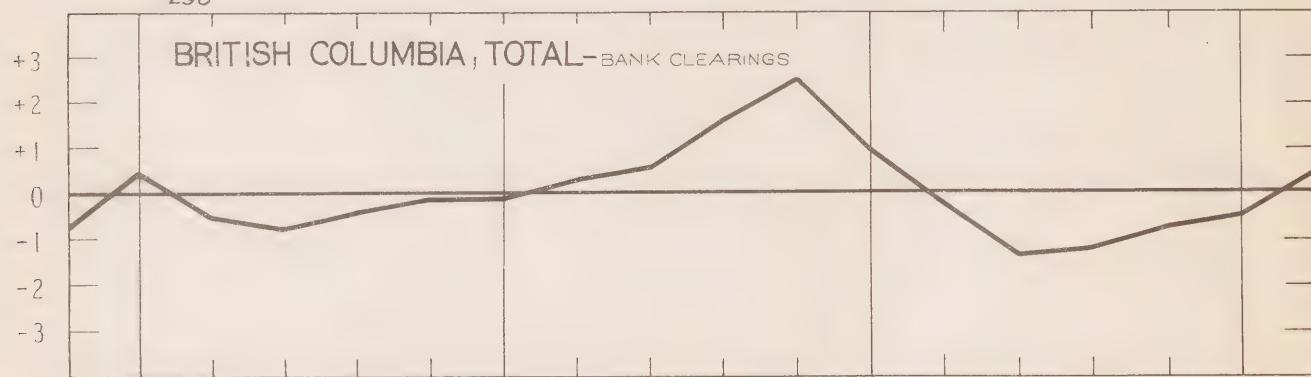


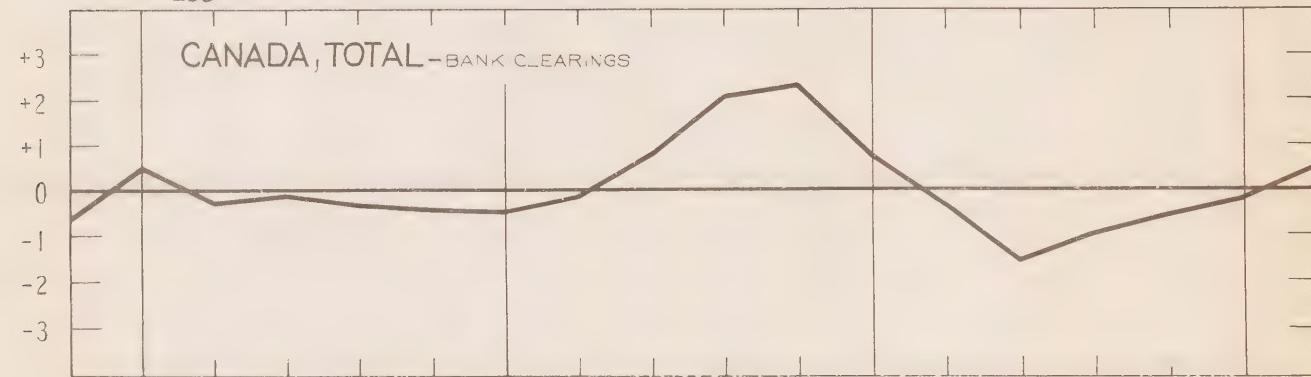
Chart 297



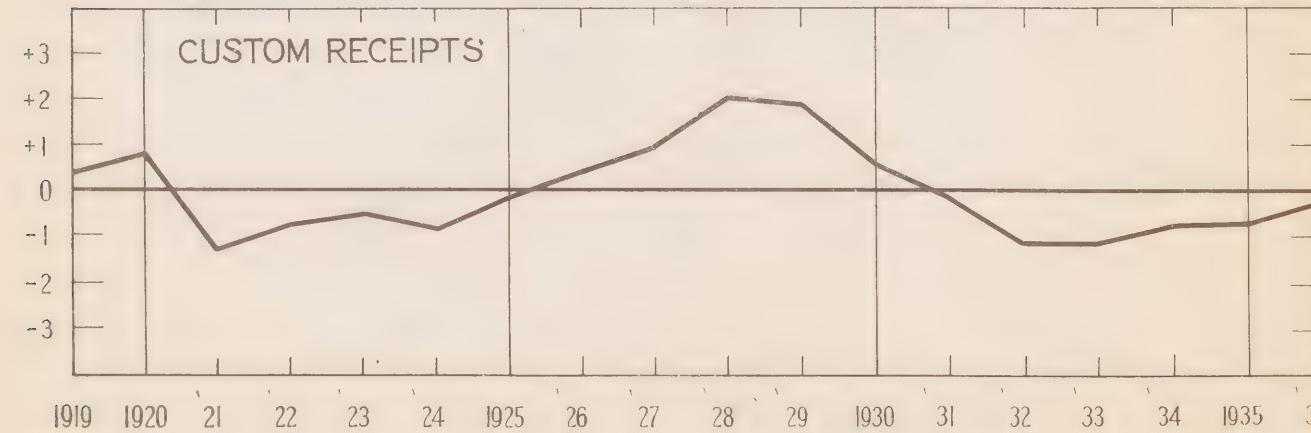
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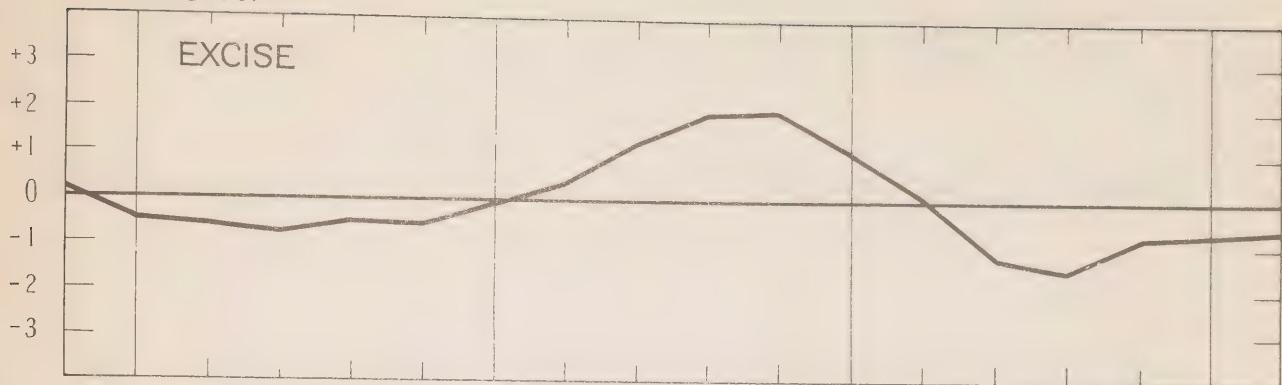


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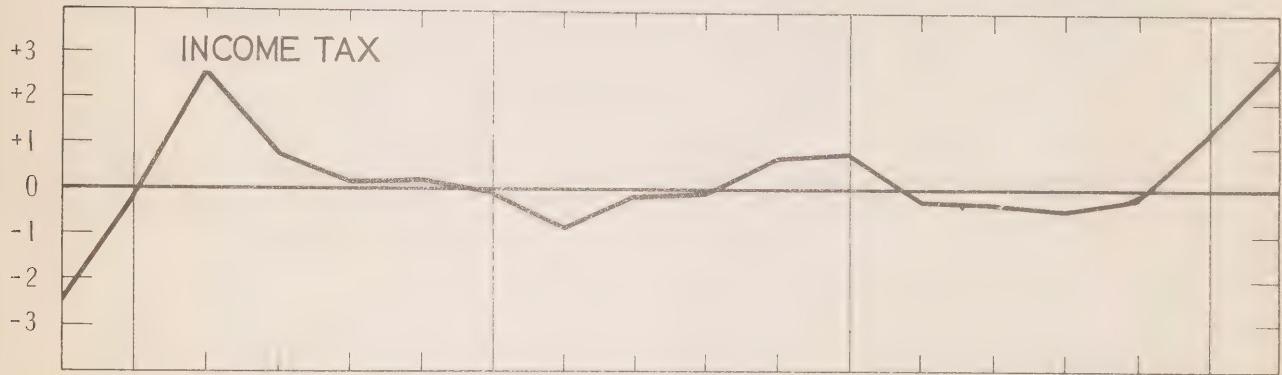


1919 1920 1921 1922 1923 1924 1925 1926 1927 1928 1929 1930 1931 1932 1933 1934 1935 1936

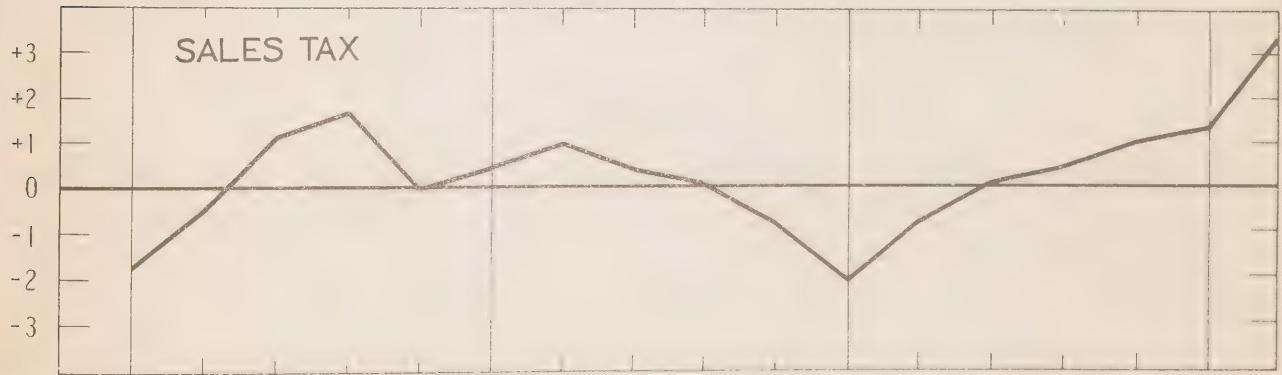
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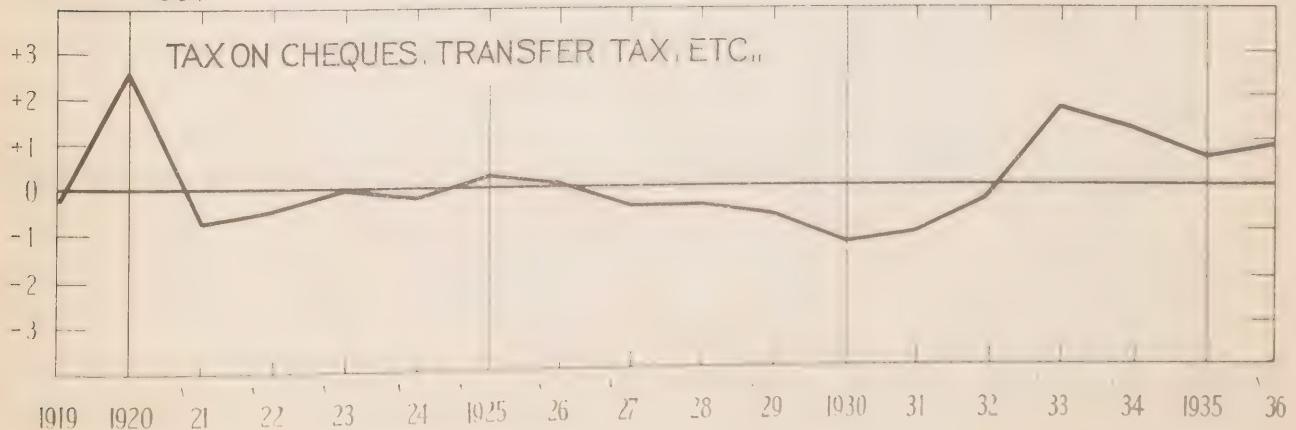
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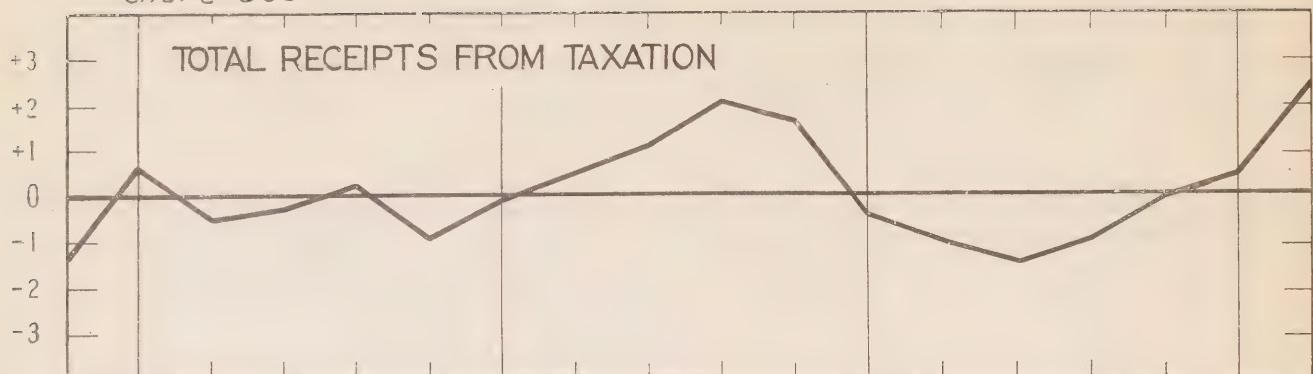


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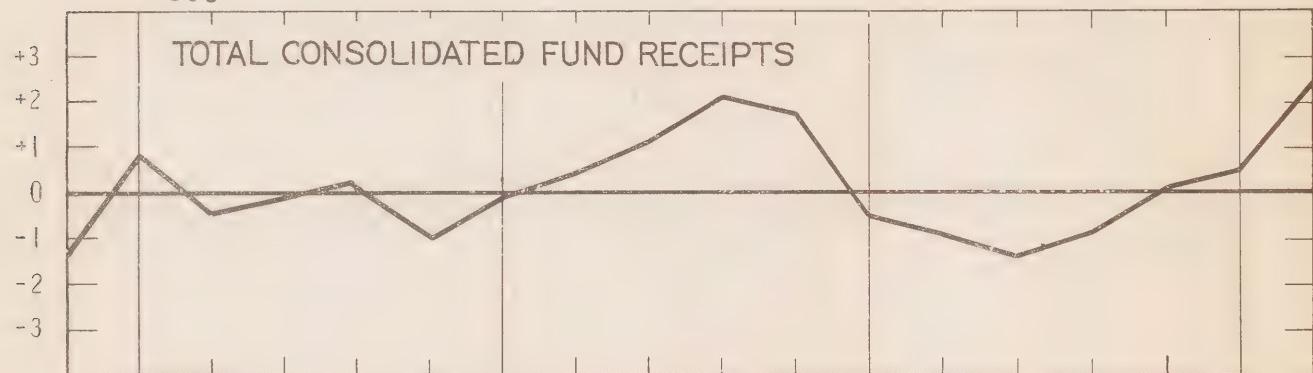


1919 1920 1921 1922 1923 1924 1925 1926 1927 1928 1929 1930 1931 1932 1933 1934 1935 1936

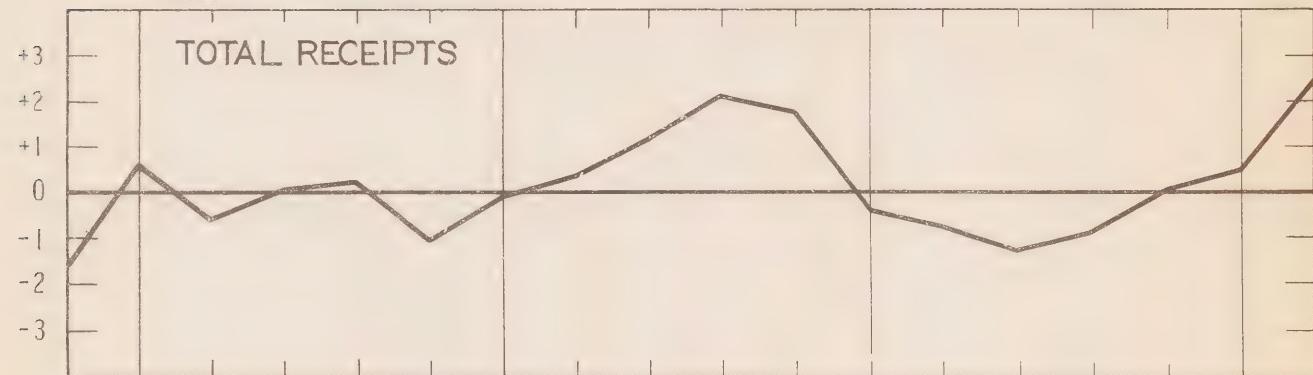
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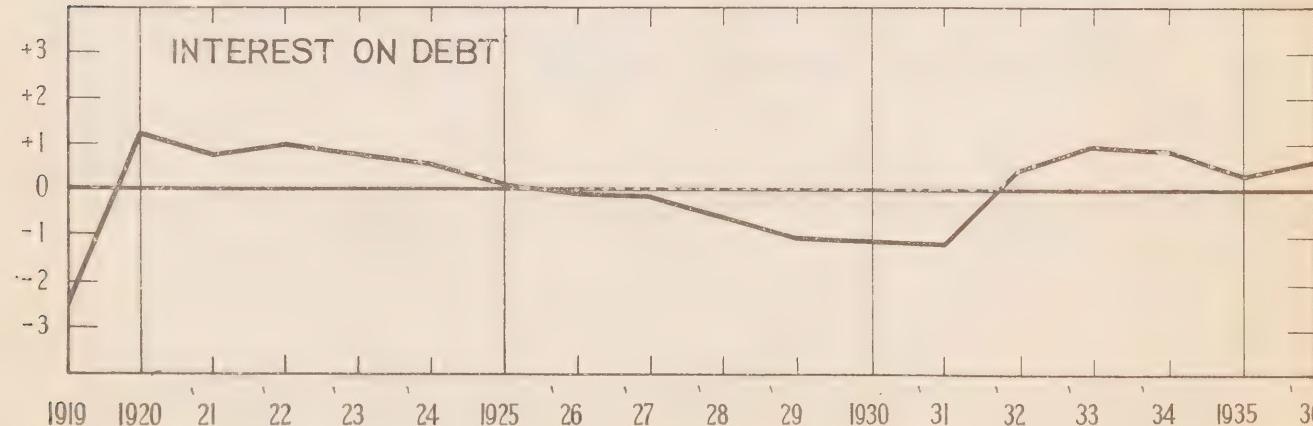
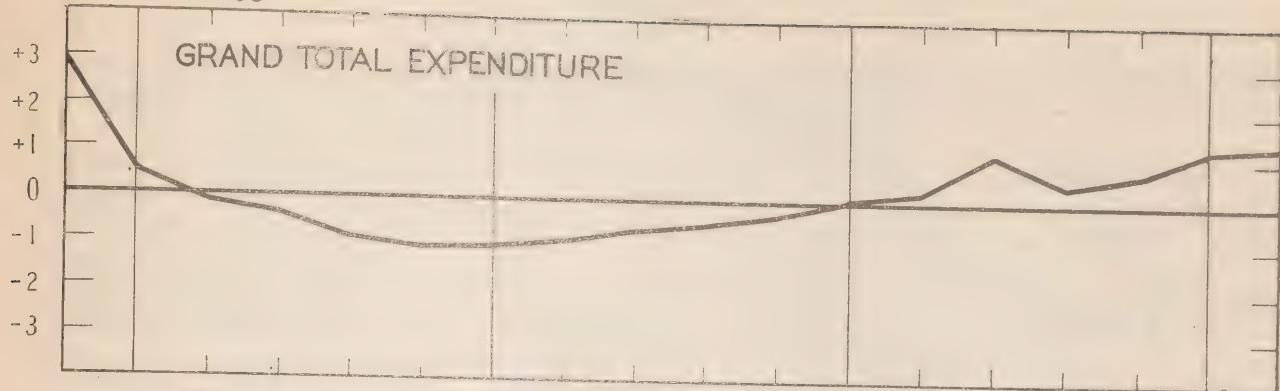
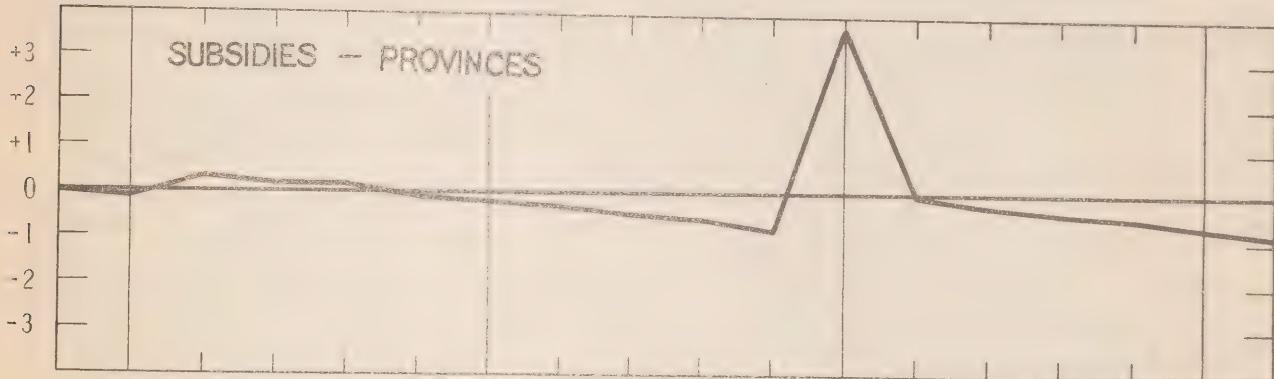


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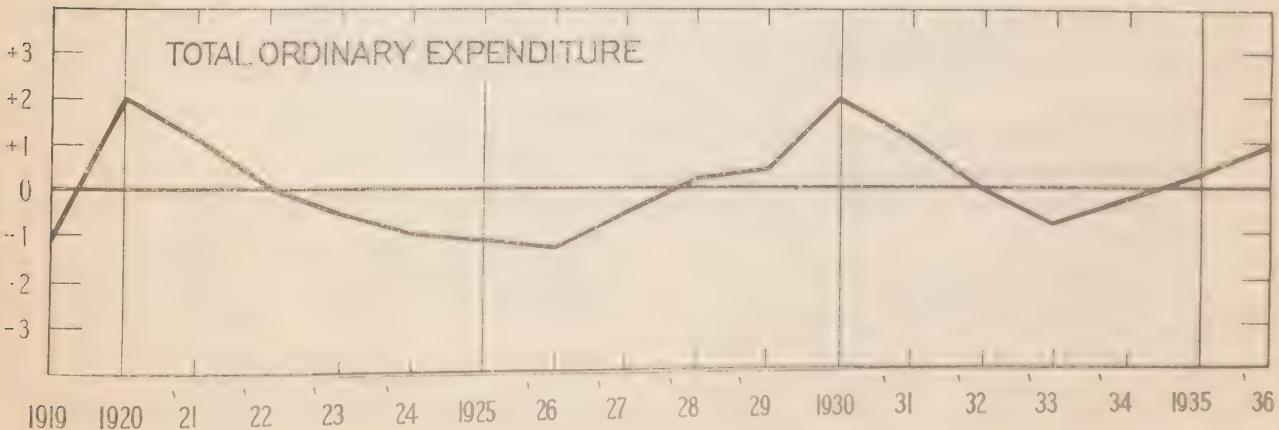
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1919 1920 21 22 23 24 1925 26 27 28 29 1930 31 32 33 34 1935 36

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FLUCTUATIONS ÉCONOMIQUES
AU CANADA
1919 - 1936

SUPPLEMENT DE LA
REVUE DE LA SITUATION ÉCONOMIQUE

JANVIER, 1938



OTTAWA
1938

Prix, 25 cents

